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Frank H. Knight

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THE RÔLE OF PRINCIPLES IN ECONOMICS AND POLITICS*

By Frank H. Knight

The more-than-generous words of introduction by the chairman may suggest or illustrate the underlying theme of my remarks to follow—the conflict of values. Needless to say, the value qualities of an introduction lie in the fields of morals and esthetics. No one would think of applying the category of truth. And as to utility, the "function" of an introduction seems to be, by a little amiable and gracefully stated prevarication, to add to the embarrassment of the speaker—if he has enough modesty or candor in self-appraisal to be subject to embarrassment. I say this, not to return unkindness for kindness, but for the serious purpose stated, of illustrating what I believe to be a profoundly important principle in connection with principles; and I wish I had more time than I shall be able to take, to consider in particular the conflict between truth and other values, specifically in a liberal ethic and culture.

Let me add that I am modest and candid enough to be "plenty" embarrassed already. It is not only my inadequacy to the occasion and dislike of disappointing an audience such as this. The occasion comes to me at a time when members of our profession cease, by the usual official standards, to be useful and are pensioned off—decently and quietly laid on the shelf. And, standing at this vantage point and surveying the history of our society, of West European civilization and of the world, during the generation and more in which I, with colleagues in economics and other branches of what is called social science, have been diligently "improving" that society and the world, I find little cause for jubilation or enhancement of self-esteem. And if I turn to

* Presidential address delivered at the Sixty-third Annual Meeting of the American Economic Association, Chicago, December 28, 1950.

view the standing of my profession in the world, or that of my special branch of it, dealing with principles or "theory" in the profession as a whole, I get no more comfort from what I see. So, I have proposed for the address which custom demands on this occasion, a bit of general stock-taking. Such an endeavor is itself reasonably in accord with custom, if somewhat strange for a "learned society," and I hope it is a custom not dishonored in the observance. Custom also allows the speaker, perhaps especially one of the age of this incumbent, to take a somewhat personal or reminiscent tone, and to verge toward the character of a sermon rather than that of science or scholarship.

My embarrassment, not only at standing before this audience, but in all teaching and writing about economic principles, is not new, as its source is not. I have been increasingly moved to wonder whether my job is a job or a racket, whether economists, and particularly economic theorists, may not be in the position that Cicero, citing Cato, ascribed to the augurs of Rome—that they should cover their faces or burst into laughter when they met on the street. Thus, for reasons which I hope to develop, briefly, my interest has of late tended to shift from the problems of economic theory, or what seem to be its proper concerns, to the question of why people so generally, and the learned élite in particular, as they express themselves in various ways, choose nonsense instead of sense and shake the dust from their feet at us. And also, why the theorist is so commonly "in the dog-house" among economists, as classified by academic faculty lists and books and articles in learned journals carrying the word "economic" in their titles.

And I also note that the period of my career as an economist has been marked by a series of "movements"—I will not say fads—in economic writing and teaching, consisting largely of attacks on traditional views of the nature and function of economics, in which the term "orthodoxy" commonly appears as a "cuss-word," an epithet of reproach. The critics, aggressors, have more or less explicitly advocated the abolition of an economics of economic principles and its replacement by almost anything or everything else, other principles if they can be found—psychological, historical, statistical, political, or ethical, or no principles at all but factual description of some sector of social-human phenomena called "economic" for reasons not clear to me. I cannot comment in detail on these fashions in thinking. The latest "new economics" and in my opinion rather the worst, for fallacious doctrine and pernicious consequences, is that launched by the late John Maynard (Lord) Keynes, who for a decade succeeded in carrying economic thinking well back to the dark age, but of late this wave of the future has happily been passing.

This same period of history has also seen a growing disregard for

free economic institutions in public policy—increasing resort to legislative and bureaucratic interference and control, the growth of pressure groups employing both political and "direct" action to get what they want, and with all this the debasement of the state itself, completely in much of the European world, from free forms to ruthless despotism. It is surely legitimate to ask whether there is some connection between the movement of economic thinking and that of political change.

Now all thinking involves "principles" in some sense, at least the formation of concepts and fitting of concrete data to concepts through propositions. Surveying the quality of economic thinking in matters of policy which seemingly tends to win out, one faces the unpleasant question whether, if people will not think more or less correctly, it is good for them to think at all. Perhaps it might be better to go back to the good old days when men believed and did what they were told by hoary tradition and constituted authority. For so the great mass always lived, prior to the advent of our historically unique West European civilization a couple of centuries ago. Perhaps the "principle" of authoritarian dictatorship is right after all—or inevitable, which for practical purposes comes to the same thing—as large groups even in this country insist and preach. And I do not mean only the Communist Party and its sympathizers; there are others, far more numerous, who are among its most vociferous opponents. For one totalitarian party will naturally hate another with different leaders and slogans far worse than they will hate those who stand for freedom.

My doubts and discouragement—for there is no reason to avoid such words, since I propose here to place truth ahead of other values—are not new. It has long been my habit to mention to classes the sinister import of such intellectual phenomena as protectionism in foreign economic policy; and the perpetual popular demand for making capital cheap by manufacturing money; and for creating a demand for labor by enforcing all sorts of inefficiency, waste and even destruction. The free-traders, as has been said, win the debates but the protectionists win the elections; and it makes little difference in our policy which party wins, the avowed protectionists or the professed free-traders. Inflation is of course to be brought on as a more pleasant alternative to taxation, and then suppressed by law and police action. Try to get people to see that if the value of money has been depreciated by, say, forty-five per cent, any price, charge, or tax that has not risen in money terms by over eighty per cent has actually been reduced. If the rulers of democracy, the demos, will not heed simple arithmetic, what is the use in talking and writing about problems which really are problems?—not to mention developing higher mathematical for-

mulas in which the "given" magnitudes must be largely guessed at. Why engage in public discussion at all, unless one is content with what seems to be our rôle to serve as an antidote to the poison being disseminated by other social scientists, even economists? Is it not insulting one's own intelligence?

The serious fact is that the bulk of the really important things that economics has to teach are things that people would see for themselves if they were willing to see. And it is hard to believe in the utility of trying to teach what men refuse to learn or even seriously listen to. What point is there in propagating sound economic principles if the electorate is set to have the country run on the principle that the objective in trade is to get rid of as much as possible and get as little as possible in return?, if they will not see that imports are either paid for by exports, as a method of producing the imported goods more efficiently, or else are received for nothing?, or if they hold that economy consists in having as many workers as possible assigned to a given task instead of the fewest who are able to perform it? Of late, I have a new and depressing example of popular economic thinking, in the policy of arbitrary price-fixing. Can there be any use in explaining, if it is needful to explain, that fixing a price below the free-market level will create a shortage and one above it a surplus? But the public oh's and ah's and yips and yaps at the shortage of residential housing and surpluses of eggs and potatoes as if these things presented problems—any more than getting one's footgear soiled by deliberately walking in the mud. And let me observe that rent freezing for example, occurs not at all merely because tenants have more votes than landlords. It reflects a state of mind, a mode of reasoning, even more discouraging than blindness through self-interest—like protectionism among our Middle-Western farmers.

One must grant that some critics of rationalistic economics seem to have something, in their contention that theories based on the assumption that men are reasoning beings run contrary to facts. But, from the standpoint of policy, the question is, will they be more reasonable in more sweeping political action, considering that it is absurd governmental policies which lead to the criticism in the first place? However, one notes that protectionism and "featherbedding" of organized workers, and even monetary inflation are not (not often) carried to the logical point at which all exchange and specialization through exchange would stop, or all accumulated resources be eaten up. Explanation of policy might conceivably get farther if we did take a more psychological tack and instead of reasoning logically, ask *why* men believe and practice nonsense but in general act so much less irrationally than they argue—and what follows from that. Presumably

our lucubrations must have *some* relation to the public interest if we are to expect public support; but why they pay us for it anyway is one of the deep economic mysteries, one might say another striking example of popular economic irrationality. However, any politician can always find an "economist" to endorse any position or policy he sees fit to advocate, and perhaps this is the proper function of our "science" in a democracy.

Let me say here that I feel like apologizing for the negativistic and even complaining tone of my remarks so far—for there is no transgression more unforgivable than refusing to be "optimistic," and "constructive." But I started out by mentioning the conflict of values and especially that between truth and other values, and have said that on this occasion I propose to give a considerable preference to truth over other standards. It is an advantage of getting old, which I believe even Cicero overlooked in his great apology for age. A certain independence goes with getting to a point where one will hardly be hunting a job or running for office or (probably) even courting the ladies. One may then indulge in the luxury of a moderate amount of candor, even of calling a spade a spade. And unpleasant truth—and truth is likely to be unpleasant, or we should not place so much stress on optimism—may be useful, up to a point. I would not carry it too far, but occasionally, and in homeopathic doses, as it were. I am reminded of a deep philosophical observation made by a high politico in a speech some years ago, here in Chicago I believe, as reported by T. V. Smith: "The time has come to take the bull by the tail and look the situation square in the face." It has occurred to me that one of the interesting "facts of life" is that the expression itself refers to things so ugly or unpleasant that they are to be kept out of sight or explicit mention. If time allowed, I should like to follow this out with some "research" into the reasons why our professional stock in trade is referred to as "the dismal science." At any rate, I do wish to stress the importance of negative conclusions, particularly in relation to action, the advisability of *not* doing things that will make matters worse, and the fact that principles of economics do have in a high degree this unromantic sort of value. And perhaps this applies to knowledge in general. A humorist once popular in this country stated my favorite "principle" in education: "It ain't ignorance that does the most damage, it's knowin' so derned much that ain't so."

I also spoke earlier of philosophizing, or preaching, in contrast with more objective discourse. A sermon should have a text; and I have found a suitable one in the gospel according to "Saint" the Marquis de Talleyrand-Périgord: The only good principle is to have no principles (*le seule bon principe est de n'en avoir aucun*). Talleyrand, to be sure,

is not regularly listed among the evangelists. But he was in fact a bishop in the Church, and another churchman, of the civilized eighteenth-century French pattern, the abbot Galiani, had earlier stated the same creed. And anyhow, the saying suits my purpose as a text. It is, no doubt, usually enjoyed and dismissed as a witty cynicism; but I propose to treat it quite seriously, as a starting-point. Not literally, I admit. It is an epigram; and an epigram has been defined as a half-truth so stated as to be especially annoying to those who believe in the other half. I wish to stress both halves, the value of principles as well as their limitations. Accordingly, I must re-word the text into one of rather the opposite literal import. The right principle is to respect all the principles, take them fully into account, and then use *good judgment* as to how far to follow one or another in the case in hand. All principles are false, because all are true—in a sense and to a degree; hence, none is true in a sense and to a degree which would deny to others a similarly qualified truth. There is always a principle, plausible and even sound within limits, to justify any possible course of action and, of course, the opposite one. The truly right course is a matter of the best compromise, or the best or "least-worst" combination of good and evil. As in cookery, and in economic theory, it calls for enough and not too much, far enough and not too far, in any direction. Moreover, the ingredients of policy are always imponderable, hence there can be no principle, no formula, for the best compromise. That laws must be stated in sentences partly accounts for the familiar "principle," "the law is an ass." And if people don't have good judgment, or won't use it, it is "just too bad," for themselves and for others over whom they have power.

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After so much by way of "preliminary," I am at last ready for some consideration of economic principles. These have, or surely ought to have, two kinds of significance: in explaining what does happen and in providing guidance for bringing about what is thought desirable or what "ought" to happen. In the first rôle they assimilate to principles of science; in the second, they raise questions of political principle, since action must be primarily political, and both economic and political principles are inseparable from ethics. Political principles are of course affected by the same ambiguity, they both explain and direct, and this is also true in a sense of the ethical. The problem is complicated by the tangled relation between the two concerns, explanation and critical evaluation; for these also are inseparable, yet are finally contradictory. A complete explanation shows why an event is inevitable, given the antecedent circumstances; hence it excludes purposive control. Here

I propose, after a brief reminder of what the main economic principles are and what they mean, to consider them in the light of three questions: their value or usefulness, their limitations, and the possible alternatives—all with respect to explanation and guidance of action. I need hardly say that all these topics raise the deepest philosophical issues, and that only a few general and superficial observations, selected rather arbitrarily or at haphazard, are possible here. But let me note at once that Talleyrand was referring to moral principles in connection with political action, and it is with respect to these in particular that I wish to sound an emphatic warning. The most pernicious and abominable principle of all, though it has been stated and preached by the highest authorities, ecclesiastical and lay (from Athanasius to Kant) is the principle of acting on moral principles—"do right though the world perish." That is—as will be found to be true of moral principles generally—it is false and pernicious if it is taken to mean anything in particular, anything beyond the best compromise, the best combination of good and bad, and in both means and ends, where the problem has the means-end form.

Economic principles are simply the more general implications of the single principle of freedom, individual and social, *i.e.*, free association, in a certain sphere of activity. The sphere is that of economizing, *i.e.*, conduct in which quantitative means are used to achieve quantitative ends, or rather provisional ends, goods and services quantitatively comparable as means to a general end, also quantifiable. But economics deals only with the apportionment of means among the provisional ends or the proportioning of these, leaving to engineering and kindred studies the all-or-none choices among technical processes. The general end has no good and accepted name; it may be called economic well-being if it is recognized that both terms require definition. It is simply the common denominator necessarily implied in comparisons between uses of means. Acceptance of the principle of freedom makes it superfluous to define the end, and the less that is specified about it the better. The provisionally-final ends, as noted, are the *impersonal* goods and services desired and sought, produced and consumed, at any time and place. However, we must not fail to include *additional* means or resources, produced with some fraction of those in existence at a given time; maintenance of these, including all replacements, is of course part of the production of the flow of consumable things.

The free association in question is *exchange,* in *markets,* an instrumentality necessary to specialized production, and distribution of the joint result. The meaning of economics in the traditional or orthodox sense is the analysis of this system of cooperation in the production and distribution of impersonal goods. "Competition" has no necessary

or proper place in the organization and its use to describe the free choice by each of his cooperators is a linguistic accident calamitous for understanding. All "personal" association, by contrast, involves power, and personal values are not subject to exchange. The form of purchase and sale of friendliness or enmity is viewed as immoral, though there is much pretense both ways—as in most human relations. Exchange or its terms may be much influenced by personal considerations (really mixed with giving) and we actually in large measure exchange dinner-parties, various presents, etc., as well as disfavors. (*One* reason why a science of human behavior, in the literal sense, is impossible is that, in contrast with physical objects, our behavior is so saturated with varied make-believe and deception, not clearly separable from the "realities.") A special and very important form of exchange occurs when one person places his economic capacity under the direction of another, on terms fixed by agreement—the principle of "entrepreneurship." Such direction is a distinctive service in that it cannot be measured until after the arrangement is liquidated, hence cannot be treated as a means-of-production or "capitalized" as can be done with other services, including the personal type, as far as contracts can be enforced.

The "perfect" market (mis-called perfectly competitive) is unreal but conceptually necessary. It is the embodiment of complete freedom. There are no power relations, since everyone has a choice among a number of equally good alternatives. The freedom in question centers in the right of each to be the judge of his own values and of the use of his own means to achieve them. There is no implication of selfishness or any other judgment of the moral quality or artistic taste reflected in any want or act. We usually speak of "individual" freedom, but it applies to any group acting as a unit. The family, "represented" by its "head," is the usual minimum unit, and there are other units in unlimited number and variety. Wants and resources are treated simply as "given" attributes of any individual or other unit; "technology" must either be included among resources or added as a third given—the latter the more useful procedure. On the average, an economic subject's own person, with all its capacities, is the chief means under his control and is in the majority of cases nearly his only resource. Differences between personal capacities and external "property" are the creation of the legal system, and would be absent under a slave economy. The virtual outlawing of enforcible contracts for personal services creates a serious disadvantage for one whose resources are in the personal form; for he cannot freely "realize" future value by sale or pledge and is consequently dependent on a continuous market as well as continuity in the capacity itself. But the benefits of freedom are presumably thought greater than the evil.

The principle of freedom is apparently accepted in modern civilization—consequently called "liberal"—on three or four grounds, which overlap somewhat. First, and most commonly cited, it is instrumental to the realization of other ends accepted as rightful. Modern thought locates value in the individual rather than making him an instrument to the purposes of the state or its ruler. And it is assumed that the normal adult person is ordinarily a better judge of his own interests, values, or well-being, than any agent of society (bureaucrat) given authority over him is likely to be. Second, freedom itself is a thing men want, and have a right to, even possibly at the cost of a formally better management of one's affairs by an overlord of any kind; the normal person prefers within wide limits to "make his own mistakes." Third, it is a "value," a thing the individual ought to want, even ought to have if he may not choose it, a part of the modern ideal of the dignity of the person. Thus the laws of liberal states do not allow men to sell themselves (or their children) into "involuntary servitude," even if they so choose, though everyone is free from day to day to place himself or his property under the direction of another, on terms satisfactory to both parties. This is the entrepreneurial relation, which is in a real sense the central feature of the modern free economy. Finally, there is a fourth, "pragmatic" reason, for extending the scope of freedom; policing is costly to the public authority and coercion itself needs to be economized.

From the standpoint of explaining actual behavior, one can only "submit" that people want to economize and that their efforts to make resources go further are more or less successful; also that correct apportionment of resources among uses is a way of economizing, as are specialization through exchange of products and the organization of effort under specialized direction. A large sector of individual and social behavior is then more or less fully "explained" by these principles. How far they go, and what other principles or unsystematic occurrences may have to be considered, I obviously cannot take up in detail here.

Certainly economic principles are subject to sweeping limitations as to their explanatory value. They tell us nothing about concrete economic facts, *what* wants people have, *what* goods are produced and exchanged, *what* resources and techniques are employed, *what* distribution takes place. The justification of treating these data in a purely abstract way is the significance of theory for policy, and I shall come back to that. Further, it is easy for a critic to "riddle" the principle of abstract rationality. No one thinks, I hope, that consumers consciously strive to maximize satisfaction, well-being, or whatever it be, by acting in relation to a known function connecting the state in ques-

tion with measurable quantities of things available at given prices. Effort to get the maximum return in money for productive services seems more realistic, but the view that production is purely in order to have consumption, unaffected by interests of its own, is clearly indefensible. Yet comparisons between uses of means are made and apportionments effected; and the logical principles inherent in these acts are useful for interpretation even if they do not accurately picture the conscious motives. It suffices that men largely behave "as if" they were trying to conform to the principles. These have great value in the prediction of effects of changes, effects both on and through price movements, changes that happen or are contrived. And the alternative, which is statistics on a behavioristic basis, is subject to much the same limitations, rooted in the vagueness and instability of motives. Certainly the main effort in statistical economics, the prediction of changes in business conditions, has not produced results justifying much elation.

More detailed consideration would carry us into the question of the possibilities and limitations of a natural or positive science of human conduct. Many limitations are plain to see, and they are related to the essential fact, which is that such a science is not what we need; indeed, the idea is an absurdity. For, if even two people predict one another's behavior and act on their predictions, both predictions will be falsified and the activities of both parties misdirected. From the standpoint of explanation alone, motives correspond to forces in mechanics. These too are unobserved, metaphysical; we read them into the phenomena for interpretation, because our minds work that way. Forces, however, are known and measured only by their effects, hence always correspond exactly with the latter. But we have other information about human motives, and "know" indisputably that they do not correspond closely with results, that the connection is affected in all degrees by *error* of numerous kinds. Particularly, where motivation takes the form of using means to achieve ends, either may be more or less "wrong," and the two errors are only vaguely separable. In this field, knowledge is so vague and evidence so conflicting that no one can tell with any accuracy at all, even afterwards, to what degree any action is really economic. Still further, we know that the goods and services produced, traded, and consumed do not correspond to final or real wants. These are largely not individual, as the theory requires, but inhere in social relations, such as "keeping up with the Joneses," and "getting ahead of the Joneses"; or, they are symbolic, even deliberately "set up," as in play, to make action interesting and yield the feeling of success or victory—thus reversing the means-end relation assumed in economics. Or, the motive is no particular result but mere gratification of curiosity

as to what the result will be. And all these symbolic relations are extremely unstable and change unpredictably.

Since a fetish of "scientific method" in the study of society is one of the two most pernicious forms of romantic folly that are current among the educated, this theme ought to be developed at a length which is impossible here. (The other "folly," which will receive more attention presently, as my main theme, is the idea that devotion to moral principles offers the solution of social problems.) "Science," in the meaning of the natural sciences, can of course do something toward both explaining and directing social events; and nothing is further from my purpose here than any belittling of the importance of ethics. What I insist upon is an understanding of the meaning and limitations of simple or statable principles in both areas. In the naive form in which both doctrines, scientism and moralism, are usually preached, both are antithetical to the principle or ideal of freedom; they imply, and if taken seriously would lead to, absolute authoritarianism. The notion that evils are due to sin works out, as European history makes clear, in having the right people (as shown by their being in power) enforce their orthodoxy on all by burning or otherwise liquidating the heretics, schismatics, and infidels, as occasion demands, though mainly by effective indoctrination and conditioning for submissiveness before the age of responsibility. The principle has merely been taken over by the Marxists from historical ecclesiastical Christianity, with unimportant changes in moral or political content, though with sweeping but practically irrelevant change in the professed underlying metaphysic. As to a "science" of human conduct, I have mentioned some difficulties, notably that one of the most distinctive traits of man is make-believe, hypocrisy, concealment, dissimulation, deception. He is the clothes-wearing animal, but the false exterior he gives to his body is nothing to that put on by his mind. My evangelist, Talleyrand, also remarked that speech is the medium by which men disguise their thoughts. The "real wants" or wishes, referred to before, run largely in pairs of opposites; besides conformity and distinction we find familiarity and novelty or fixity and change, adventure and security, and so on. Mostly they have no specific content and anything that happens or is done will fit one or the other of some pair. Such principles cannot explain any concrete occurrence, the obvious weakness of the "instincts" that were the groundwork of a "psychology" very popular some years ago.

Another obstreperous feature of human phenomena is that men have "attitudes" toward law as such, both descriptive and imperative law, and both positive and negative attitudes. If there is a law, either

a uniformity or a command and someone finds it and publishes it, one of the first results is a general impulse to violate it. Man is a "contrary critter"—in contrast with the conformism of physical nature. And on the other hand, men love to make laws for their own sake, to conform for a while, until tired of it, then break them and make new ones. Much of the apparent uniformity of behavior is such ritual. And there may be substantive reasons for non-conformity, or for temporary conformity that ultimately causes disruption of the pattern. A familiar example is boom and depression in various prices and in general prices —the purchasing power of money. An accepted prediction of change will cause the change predicted, for a time, then an inevitable reversal. It is true that many generalizations can be made about men and about all known societies. Professor Murdock has listed some dozens of them. But they are of a general, abstract type. All men have a language—but what language? and what will they say in it or with it? And so with numerous institutions. Every society has a technology which "works" up to a point, keeps people alive; but in spite of the conformity of the physical world to uniform natural laws, the fact tells us virtually nothing significant as to what to expect in the way of concrete "economic" behavior, corresponding to the prediction of planetary orbits, eclipses, etc., or the outcome of physical operations. (But if a physical operation is experimental, problem-solving, prediction of the result or the course of the operation itself is a self-contradiction.) All peoples and most individuals have some religion. But the careful student, Professor Lowie, finds it impossible to give a general definition of the word, and the dictionary definitions, vague as they are, do not cover actual usage. The simple fact is that we commonly recognize and describe human behavior forms as expressions of some feeling, intent, belief, not as bare acts. And our terms often contain an inseparable value-judgment as well; there is no specific intent, not to mention a specific act, of murder or theft.

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All this about the abstract and interpretive character of economic theory or principles has little to do with their significance. That is because their main value is connected with policy determination, under the fundamental ethical principle of freedom. Assuming that men have a right to want and strive to get whatever they do want, and to have the tastes and "higher" values they do have, as long as their conduct does not infringe the equal rights of others, the business of the economics of principles, of utility, productivity, and price, is to explain that, and how, the organization through buying-and-selling enables everyone to do whatever he tries to do (whether rational or not, as judged by anyone else) many times more effectively than would be pos-

sible if each used his own means in a self-sufficient economic life. Everyone is free, as a Crusoe is free, and also enjoys the nearly boundless gain in the effectiveness of action possible through organization. In fact, the individual's range of choice is extended in a new dimension beyond that of Crusoe; he can produce anything he pleases, or make any specific contribution to production, and independently consume anything or any combination produced by anyone anywhere in the economy. No other possible method of organization will afford this two-fold freedom. And anyone is also free to stay out of the system and live his own self-sufficient life, as far as he cares to stand the loss in efficiency—which usually in fact would rapidly become too great to be borne. And all are free to give and receive goods or counsel, and to cooperate on any terms other than those set by the market which they, the parties concerned, may agree in preferring on moral grounds or for any reason. Distribution, what the individual (family unit) gets out of it all, is also in principle the same as with a Crusoe; it is what he produces. That is, what he—the productive "capacity" he furnishes —adds to total output, which is the only meaning the product of a unit can have when production is a joint activity. In fact, the "imputation" process under market-competition is valid in the sense in which any single causes produce an effect where causes act jointly, as they always do. It is the *difference* caused by the single contribution, as isolated by the mathematical operation of partial differentiation. (Consumption is usually treated, not very accurately, as unorganized.)

Stating all this at length makes me feel that I ought to apologize to you, and to myself; for it is really at the level of truism and triviality. Of course there are "assumptions": that free association implies mutual advantage and that freely chosen advantage to individuals is "good," in contrast with obedience or ascetic self-denial or self-torture (as men professed to believe even in Europe only a few centuries ago). It is assumed that in general normal adults are rational enough to be trusted to manage their own affairs, and decent enough to allow others to do the same; but this means only in comparison with the dictates of some human authority, political or ecclesiastical, chosen in whatever way, who might be in a position to order them around. The ethic of liberal civilization holds (I repeat) both that men want to be free and have a right to be, and they ought to be free, even if they themselves feel that their affairs might possibly be technically better managed for them as slaves by some possible master. Of course even these assumptions in an extreme version are made only for the purposes of theory; everyone admits that in practice governments have to set some limits to individual freedom and freedom of association and to perform many functions on behalf of the community as a whole. If only eco-

nomics could really teach people the simple and obvious fact, which most of them already know but refuse to accept, that anyone producing for exchange is producing for himself, as much as a Crusoe, but merely a thousand times more effectively because he does it indirectly by producing for the needs of others. If this were realized, it would surely put an end to all the insane or diabolical revolutionary propaganda and most of the stupid criticisms of the "capitalist system" that menace our free institutions. Why it is necessary to teach this, and accordingly so hard, if not useless to try, is the major real social problem. I can give it little consideration here. But I must note an apparent "innate disposition" in men to think that somebody is getting the better of them, that they are working for somebody else, even where it is, if possible, more absurd than the idea of the wage-worker that he is working to make profits for some greedy capitalist. Doesn't the student regularly talk about working for his professor, and even the patient aver that he is coerced by his doctor, whom he hires and fires and even defies, at will—except for the natural consequences? The much-abused "profit-system" is of course merely a pattern of cooperation, on the terms most satisfactory to the parties concerned, or the only terms they can agree upon. "Property" has intrinsically nothing to do with it; it may be and is the same where only labor services are involved at all.

I wish I had time to follow up in particular the relation between doctor and patient. The similarities and differences as compared with, say, the relationships of an industrial corporation, should be interesting, even instructive. Two or three obvious facts which need emphasis must be barely mentioned. The doctor in whose hands one places oneself as a "case" will inevitably have much power, variously and precariously limited by moral, legal, and other restrictions and compulsions. The only real freedom the patient can have is the right and opportunity to choose and change at will his doctor. And the significance of this is limited, since in the nature of things the patient cannot act very intelligently in the matter. He would himself have to possess the specialized knowledge of the medical profession, and much more, in order to appraise it in others. But the case of individual patient and individual doctor (or other professional counselor) is simple in comparison with the problem presented by the vast and highly organized productive units required for the exploitation of modern technology. Here centralized direction is imperative anyway, apart from specialized competence in the directive function. Hence the final word of the candid economist to the public must be—don't expect too much, in the way of freedom, *or* justice, along with the immeasurable increase in technical efficiency that results from these two facts of modern civilization, special competence, and centralized direction. In particu-

lar, don't expect too much of "the state"; be very critical in appraising the prospects for good and for harm to result before calling on "Leviathan" and giving him power. In the scope of this address, this, the most vital conclusion, must be stated rather than argued; but it remains true that the chief reliance of the "employee" must be freedom of choice among employers, unsatisfactory though it is, as in the case of the patient and the doctors.

Given the principle of freedom, as active freedom of association, the notion of scientific control of society is a palpable contradiction. (It applies in varying degree in the treatment of defectives, young children, and criminals.) For a *dictator*, the problem would be *formally* parallel to that of scientific technology; but even in that case, the content of control would be utterly different. For, unless he could completely drug or hypnotize and so eliminate the minds and wills of his subject-slaves, the autocrat-proprietor of a society would have to rule *through* those minds and wills. Hence the operation would employ such techniques as persuasion or coercion, suggestion, cajolery, flattery, and, above all, deception—which is at the heart of what is called "force" in human relations—and also, inevitably, some real discussion. But these things have no meaning for the relations between purposive human beings and the inert objects of nature where scientific technique is literally applicable. (The higher animals, notably in domestication, present an intermediate situation which must here be ignored.) In a democracy, the notion of control is not merely unethical, it is excluded, *ipso facto*. The self-contradiction of a number of persons mutually predicting one another's behavior and acting on their predictions has already been pointed out, and that of mutual control is even more obviously absurd. The problem of democracy is to establish a *consensus*, by genuine discussion, with intellectual appeal to super-individual norms. Mere expression of individual desires is not discussion and can only exacerbate conflict of interests and intensify the problem, not tend toward solution in all-around agreement. Objective norms belong to a third level of reality, distinct from and above individual desire or end-and-means, as the category of the instrumental is different from and "above" mechanical sequence or cause-and-effect. And judgments about norms and ideals are affected by a different category of *error*, though the facts, that norms are objects of desire, and that means-and-end parallels cause-and-effect make clear analysis impossible.

Genuine "free" discussion is a difficult thing to deal with conceptually, and more difficult to realize in practice. The problem presents two aspects: first, agreement on the range in which agreement itself is considered necessary, as marked off from individual freedom and diversity, and second, the specific content of uniformity in its

sector. On any considerable scale, discussion itself must be organized; and this organization presents practically the same problems as the matter to be dealt with, specifically the limitation of freedom by rules and authority in order to secure the greatest possible freedom and the performance of function.

The supreme and inestimable merit of the exchange mechanism is that it enables a vast number of people to cooperate in the use of means to achieve ends as far as their interests are mutual, without arguing or in any way agreeing about either the ends or the methods of achieving them. It is the "obvious and simple system of natural liberty." The principle of freedom, where it is applicable, takes other values out of the field of social action. In contrast, agreement on terms of cooperation through discussion is *hard* and always threatens to become impossible, even to degenerate into a fight, not merely the failure of cooperation and loss of its advantages. The only agreement called for in market relations is acceptance of the one essentially negative ethical principle, that the units are not to prey upon one another through coercion or fraud.

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This picture of the open-market, free-enterprise organization must sound very one-sided, and it *is* one-sided. Presumably, no competent mind has ever believed in it exclusively. If there have been real anarchists, they were not economists. And the society pictured by the pure, idealized theory of the market economy is, or would be, one held together by the single moral principle just stated. This is entirely proper as a postulate for theoretical analysis at a certain stage of abstraction. But the idea that freedom, or any single principle, contains the solution, or the best solution, of social problems, is of course unrealistic, and is directly contrary to the thesis of this paper, as stated at the outset. Exaggeration of the significance of freedom, or overemphasis, to the neglect of other principles, was the great error of the liberal age, and is partly responsible for the reaction we now witness, which threatens extinction of freedom and of all defensible values. It should go without saying that freedom alone would not produce an approximation to the conditions required for a market itself, the freest possible market. And modern economists have not thought otherwise. The accusation that Adam Smith, for example, believed in a universal harmony of interests among men, is merely one discouraging example of what passes widely in learned circles for history and discussion. At a minimum, rules must be made and enforced by some agency representing the whole market collectively; and the policing must be paid for on a principle other than direct individual payment for service received. And at most, as I have emphasized, the market deals only in impersonal values. To realize its ideal character, the system would

have to be operated through vending machines, avoiding personal contact between the parties to exchange. At this point, I turn to more detailed, though brief and inadequate, notice of the limitations of freedom, from the standpoint of policy, or of freedom as a policy. This will be followed by an even briefer glance at the alternatives and the final practical problem, making up the classical three parts of the argument.

There is a paradox about the general problem of economic organization. One can state a case which sounds much like an "air-tight" justification of market freedom or *laissez-faire*. But if it is easy to "riddle" the notion of means-end rationality as an explanatory principle, this is still more true of the apologetic for reliance on the free market as an ideal social policy. We also encounter a logical paradox in the concept of freedom. On one hand, it is not discussable, being the presupposition of discussion, and freedom in conduct is inseparable from that in communication. Yet we are brought up short by a glance at our own history. For it is only in the small island of our own modern (post-Enlightenment) West European culture that the axiom is accepted; in history as a whole, including rather especially European history in the preceding epochs, political or economic liberty, and even more, religious-moral-intellectual freedom, was emphatically rejected, on principle, if it was ever contemplated as a possibility. The aristocratic, slave-holding town-republics of ancient times hardly call for mention as exceptions. Though we can learn from their experience and discussion because some problems of democracy arise within any ruling class (unless it is an established hierarchy headed by an absolute authority like Hitler, the Pope or Stalin, with effective provision for the succession). The rise of the strange phenomenon of modern liberalism is undoubtedly to be explained in part as a reaction against the peculiar dogmatism, intolerance, and obscurantism of medieval "Christian" Europe. But much of the former spirit is with us yet; and the superposition of an ethic of extreme freedom and individual rights on an extreme authoritarianism of obedience and duties based on status, is surely a chief source of the moral-intellectual confusion of our age, of which we hear so much (and so much nonsense). And a kind of pendular principle in history no doubt helps to account for the new turnabout which has carried so much of the world back to despotism.

My own view of the social-economic policy is not greatly concerned with the notion of treating the individual satisfaction-function as a welfare-function and proceeding to the notion of a social maximum in terms of some relation between individual maxima. It is too clearly indefensible to treat "happiness" or the "good life" for the individual as a definable end to be achieved by a definite technique; and even

more indefensible to view the objective of social-economic policy in terms of the amount and distribution of measurable impersonal goods and services. Wealth and poverty are terribly important things, but that view of their significance seems to me an absurd over-simplification. Freedom itself, as a value *per se,* is far more important. In "economic" life, in the ordinary empirical reference, the motivation of competitive sport plays a rôle at least as great as the endeavor to secure gratifications mechanically dependent on quantitative consumption. Some business efficiency expert is said to have advised reforming football by having all the men play on the same side, instead of half pushing against the other half. The real problem centers, of course, in the fact that activity has both characters; it is a game, but one in which the most vital substantive goods, comfort and life itself, are stakes, inseparably combined with victory and defeat and their bauble-symbols. The social problem is to make the best possible rules for this complex and paradoxical game, which everyone is compelled to play. And it must go on almost without interruption, and it is impossible to play a game and discuss the rules at the same time. The intellectual problem involved in rule-making is different in kind from that of play itself, and neither—it is important to note—has much relation to scientific technology, or means-end rationality; nor to our traditional religious-ethical principle of charity. For, when charity comes into a game, the game goes out; though in relation to the other aspect of the process, the production and distribution of goods considered intrinsically useful, it does have a part to play. I may suggest that the ethic really believed in and reasonably practiced by the modern man centers in sportsmanship, and the related principle of workmanship.

Even with much and costly social action, there can be no very close approximation to the theoretical perfect market, particularly in one important area, the labor market. This fact does not at all justify most of the action being taken in that field, by unions or by government; in general, the argument against price control and other interference is made stronger, not weaker, by the "imperfect competition" which is used as a defense for it. And the action we see is designed to make the market still more imperfect, and to benefit a select stratum already comparatively well off, at the expense of their weaker brethren. The effects cannot be traced and measured in detail, but it is a safe "principle" that in a power contest the weakest get the worst of it. The chief "mechanical" defects in the market system arise less out of "frictions" than out of speculative situations. When in order to act rationally each must first know or guess at what everyone else will do, the result is complicated cyclical tendencies; in particular, speculation in the future value of money gives rise to "the business cycle," sometimes an actual

social disaster. Monopoly is another evil, though the public misconceives its nature and grossly exaggerates the extent and power of business monopolies. A majority of producers and dealers have some short-run monopoly position; but in general, monopoly is temporary and functional, on the same principle as patent-rights. Protective duties foster monopoly; but where monopoly really bites is in the legal brigandage of organized wage-earners and farmers. The business interest itself is far more dangerous to free society through political action as a pressure group; but it stands no chance in competition with voting masses "agitated" and organized for power and plunder—all the worse for their self-righteous motivation. Obviously, anything like nation-wide collective bargaining and striking is coercion of the country, not of any opposed economic interest; and as noted, the heaviest cost falls on other "workers," especially those still weaker. (Perhaps I should use a more polite word; but I said I would exploit the privilege of age to put truth ahead of manners; and what does anyone, including the "honest brigand" want but his "rights," to be judge of his own case and have coercive power to enforce his own verdict?)

Far more important than all the mechanical imperfections of "market competition" (the real ones, not created by stupid or unwise public action) are limitations of the principle of economic freedom inherent in unalterable conditions of life and associative action. Our economic ills are not due to the failure of competition; on the contrary, the result of perfect functioning of the system would be socially quite intolerable. The free market, with reasonable help from state authority, can make tolerable provision for the economic cooperation of individuals and other "units," as far as it is "cooperation," as far as their interests are mutual. By the same argument it can *not* solve any other problems, and there are many other and grave problems that insistently call for solution. So in other fields: free association will solve the problems "up to a point," but not completely or by itself. Social problems are not only hard but finally insoluble. Yet many of them will inevitably get some kind of "treatment"; it is a question of better or worse, or of making things better, more or less, or making them worse than before, even to downright disaster. As I remember hearing "Tommy" Adams say in a classroom, we must not call any problems insoluble which must be solved in some way and for which some solutions are better, or worse, than others.

The most serious limitations of the free-market economy, and major problems set by it, arise from the fact that it takes the "units," individuals, families, etc., as "given," which is entirely unrealistic. In the economic aspect specifically, it "assumes" given "wants, resources and technique," in possession of each and all. The market is an agency of

cooperation between such given units; it is no agency for improving tastes (wants) or manners or especially for conferring productive capacity to meet wants or needs; it will not redistribute capacity and hence product, to accord better than the realities do with any norm of ideal justice. Business relations clearly do work to dissolve clannishness and dogmatic allegiances, and to promote tolerance, and a degree of generosity. But in the distribution of economic resources atomistic motivation tends powerfully toward cumulatively increasing inequality. For all productive capacity—whether owned "property" or personal qualities—is essentially "capital," a joint creation of pre-existing capacity (or the result of "accident"). And those who already have more capacity are always in a better position to acquire still more, with the same effort and sacrifice. This applies about as much to personal capacity as to property, though the latter is a more convenient way of passing on "unearned" advantage to heirs or successors. It is a gross injustice—by one of several conflicting norms of justice generally accepted in liberal society. But it is also the main reliance for the motivation of accumulation in all forms, hence of progress, all forms of which are directly or indirectly dependent on means and their economical use. And the tendency goes on beyond the individual life, from generation to generation, through the family and transmission of advantages. It is modified but hardly mitigated, and certainly not simplified, by the large element of "luck" in human affairs. Any serious effort to interfere with the process would weaken the family in other connections, and if it were replaced by some other primary group, the anti-equalitarian tendency might still be as strong.

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No doubt we all agree that extremes of wealth and poverty are unjust, especially when they do not correspond with personal effort or sacrifice—and are bad in other ways. The question is, what can we do about it? Can the rules of the economic game be so changed that the winnings, symbolic and real (and the former are not much inferior in importance) will accord better with some accepted or defensible criterion of justice? And can it be done without wrecking the game itself, as a game, and as a producer of the fruits on which we all live? The intricate conflict of values here cannot be spelled out in detail—freedom with order, efficiency and progress, interesting activity, but especially freedom *versus* justice. The ancient provision against misery was to stress as sacred the obligations of family and neighborhood, and "charity," alms-giving, by those having an excess over "needs." But in the main, men were told and conditioned to believe that somehow everything is really for the best, and the evils of life have to be borne

—patience and fortitude. Almsgiving tended to mean supporting the clergy and endowing religious foundations, while an uncertain fraction went to relieve poverty (real or feigned) and that did an uncertain amount of good—certainly made little impression on poverty as a whole. Modern society has largely shifted the load of relief from the family and local group, which can no longer so well bear it, or be made to, and centralized it more and more on the national government through progressive income and inheritance taxation. A vast improvement has come about, chiefly through assuring to poor children support and some equipment for earning a livelihood, with family limitation offsetting improved sanitation and medical care. This of course does not meet either ideal requirements or the popular demand—perhaps even social necessity considering, again, the children, now future citizen-voters as well as producers of more children, and soldiers. But specialists seem to agree that taxation, for peace uses, can be pushed further very gradually at best, if the practical limit has not already been approached, at least for a government that is not to employ powers incompatible with basic freedoms. So what? I have no answer to that one, especially for the crucial matter of how far society can allow free production of children and agree to support them "decently" and of necessity their parents along with them. But the classes that produce babies can outvote those that prefer "substance and culture" to large families, particularly if the latter are soft-hearted and encourage them to demand "justice." Moreover, the prolific can muster the larger armies, and perhaps the tougher too, where the distinction conforms to national areas; and it is here the conflict between freedom and equalitarian justice now is the great world menace.

With no pretense that my message is a cheering one, I can only, in the interest of what seems to me plain truth, go on to emphasize the difficulties of our problems and the danger of action that will make things worse instead of better. As is now evident, the "liberal" nineteenth century, following the rationalistic eighteenth, was wrong in its view that mere individual liberty, religious-intellectual, political and economic, would yield well-being and happiness. It did indeed accomplish wonders, supplemented by the kind of state action accepted by its original advocates. And people seem much more actively dissatisfied than before. J. S. Mill's Political Economy and Marx-Engels' Communist Manifesto appeared almost simultaneously in the middle of the "wonderful century," wonderful especially for the common man. But Mill was very critical of the institution of property; and the Manifesto called on the workers of the world to unite for the violent overthrow of all pre-existing social order, because "you have nothing to lose but your chains." Madness, criminal madness, of course; but how many of

the bright and educated have fallen for and preached it, in democratic countries where the masses are well off beyond historical comparison! And it has become the accepted political creed in the largest nations of the Old World, who now threaten us so dangerously with "liberation" in accord with its tenets. Is it human nature to be more dissatisfied the better off one is? I shall not venture an answer to that one, either.

All I can do is to indicate the nature of the problem of free society, as I see it, point out some false leads and some things that "have to be," "or else." I do not predict; it may be a case like Uncle Remus's rabbit that was "bleeged to climb a tree," to get away from a dog. *If* free society is to exist, the electorate must be informed, and must have and use economic and political intelligence and, of course, possess the moral qualities actually needful. On the intelligence factor I cannot take time to say more. I hope I have said enough to show that the problem is not of the kind so successfully attacked by natural science and technology in the interest of control by man over the natural environment. It must be "social" intelligence, of the general sort exemplified in the discussion by a group of the problem of improving a game—but with complications due to the vast scale of national and world society and the complex of conflicting interests and ideals involved. For help as to intelligence, we now instinctively turn to institutional education. This can certainly impart information, up to varying individual limits, and schools have also been successful enough in increasing knowledge—some say too successful!—and the somewhat opposed functions of transmission and revision might perhaps be better coordinated. But does education make people intelligent? As to certain "intellectual skills," no doubt it does, again up to varying limits. But as to good sense, the "gumption" required to select and reject between sound measures and crude economic nostrums, such as I mentioned at the outset, the arbitrary interference with freedom of trade, fixing prices by fiat, and preaching revolution, the evidence is not encouraging. The "smart" and the educated seem to fall for these as readily as the man-in-the-street. Indeed it often appears that the result of costly training is to make people more ingenious in thinking up and defending indefensible theories. The crackpots of all kinds and degrees are not recruited from the dumbbell or ignoramus classes. Even outside the "moral sciences," it is not these who spend their lives squaring the circle and inventing perpetual-motion machines.

What schools can do on the side of moral qualities is another question. But first let me say here what I have long believed, that the crucial problem in our whole intellectual-spiritual life, our culture, is the relations between the great values, perhaps especially truth and goodness or knowledge and virtue. I have time only for these and to note the

relative neglect of the third member of the trio, beauty and taste—taste that is good or bad, in contrast with "mere" taste—and the even more neglected rôle of play or fun, entirely left out of the good life in our Hebrew-Puritan tradition. You will recall that Socrates-Plato thought that virtue is knowledge (meaning reasoned knowledge, like mathematics, not science) in opposition to the Christian (Pauline) view, that we know the good but choose the evil. (But Aristotle at least partly disagreed with Plato, and a famous saying of Ovid sides with Paul.) My point is that I see the main task of education in our age as training to separate believing and believing-in from liking for other reasons, at the crudest level, to distinguish sound from sense and in general, truth from esthetic or moral or any "romantic" attraction. In any case, indoctrination is a vicious trap, and a liberal must wish it were impossible. The first test of a free society is that it teach its youth to question and criticize and form opinions only by weighing evidence—and to admit ignorance where there is no evidence—instead of implanting eternal and immutable truth, with abject submission to the inevitable authoritative interpreter, by some prescriptive right. And on the other side, it is an equally pernicious idea that by education a society can lift itself by its bootstraps. Who is to educate the educators? Only some absolute authority, manifestly. And control of education is the first aim of the totalitarian. His ideal is a priesthood as the custodians of Truth, "conditioning" each generation in helpless infancy to unquestioning belief, and to go through life like little children.

One of the hardest lessons which in my opinion our democracy has to learn is to make necessary reservations about much of our ethical tradition, propagated under religious or church auspices. It should be superfluous to point out that this is an inheritance from an age when virtue in the common man was thought by everyone to consist precisely in the acceptance and submission I just spoke of—conformity to a sacred law and obedience to consecrated authority, Holy Mother Church and Holy Father King. What our Sunday-school moral adages mean is simply the command to be good children and mind Momma and Poppa. They sound well, and their sentiment has a place; but if we ask what they mean, from the standpoint of democratic citizenship, they are simply irrelevant. When they were proclaimed, the idea that the ordinary man (not to mention the woman) should make and unmake the laws and literally hire and fire the rulers, would have provoked only loathing and terror, if it had been dreamed of as a possibility. Even the "Golden Rule," to treat others as you would be treated, is also an epigram. First, it should of course be as the other himself would be treated, or as "you" would be in his place, and with him in yours. But for the slave master, what the slave would want would be to change

places: "let me be master and you be slave"—which would be no improvement in the system. But such is the romantic view of God: one who puts down the mighty from their seats and exalts the lowly, who fills the poor with good things, but the rich he sends empty away. Well, turn about may be fair play, but again we get no light on how to improve the social order. Taking slavery or any institutional framework as given, humane behavior is laudable. And that is exactly what our religious ethic did, and does; it takes the established order of things as given, in fact as divinely ordained: "Let every soul be subject unto the higher powers. For there is no power but of God: the powers that be are ordained of God" (Romans, 13:1). And of course this explicitly included subservience of wives to their husbands. The only exception recorded is the right of the propagandist of the "true faith" to preach, in defiance of the authorities (Acts 5:29).

Again, as always (in accord with my theme) there is another side. Liberalism can be equally naive and as given to empty words. No adult in his right mind ever believed that men are born free and equal—except for that complete and in that sense equal helplessness, for which freedom is without meaning. The socialists and communists have called religion the opiate of the masses, and in a broad historical sense that is correct. But two other truths have not been so clear to either side in the controversy. First; some pacifier, reconciler or escape was necessary in a society that accepted the "static" philosophy of life that actually was accepted everywhere prior to the "awakening" in Western Europe in the 17th and 18th centuries. Then were born the ideas of freedom and of progress in and through knowledge and intelligent action under free cooperative association. For man is a romantic animal; and until a people is prepared to make changes by intelligent agreement, supernatural sanctions are required to make them accept what is established and not criticize or try to change it. The second fact is that—disregarding the question of how much intellectual maturity West-European peoples had attained by the age of the Enlightenment—it is certain on general grounds that the basic framework of social order must always be accepted custom, interpreted and applied by agents having a large amount of power. The possible amount and speed of free and intelligent social change will always be quite narrowly limited. This is particularly true if intelligent change is taken to mean change in the direction of the ideals of justice and freedom, justice implying some kind of fundamental equality—and other values generally accepted in our modern liberal world-view. As I would like to show at greater length than is possible here, no close approach to realization of those ideals is within the realm of possibility. Consequently, men will always require, as a condition for maintaining any high civilization at

all, some "opiate," or some effective agent to prevent their demanding their rights. The only alternative to belief in supernatural sanctions of an existing system quite far from just is that intelligence shall be fully aware of its own narrow limitations and be supplemented by a high order of tolerance, and self-sacrifice, the patient acceptance of the best all-round choice among evils. Especially, as the world is built, the chances of loss are overwhelmingly greater than the chances of gain in any effort to escape the ills we have by flying to others that we know not of. Since order is the absolute requisite of civilized life, we must stick to the order that is, until there is a reasonable agreement on changes that will be on balance beneficial.

The balance will always be hard to strike and entirely a matter of judgment, not of formula, a balance between principles that conflict, while each claims to be absolute. The danger now, in the world and in the West, is that freedom will be thrown away, for a promise or hope of justice, but with an actual result of neither justice nor freedom, and very likely the suicide of civilization in war without rules. The world could be heading toward a new age of essentially religious wars, ideological wars. Historically this would be nothing new, except for its scale and for the destructiveness of modern military technology. Otherwise, Europe is reverting to form. For as I have said, Communism, in its social program or pretensions, is largely a revival of historical-ecclesiastical Christianity, with the church more effectively merged in one all-powerful state. From the downfall of the Roman imperium to the age of liberalism, Europe lived under one or more dogmatic, intolerant, persecuting and violently proselyting religions—claiming possession of the formula for salvation they could not be or do otherwise —and much of the time in a state of war between two or more such religions. In Christianity, surely, we find the supreme "irony of history": that an original teaching centered ethically in humility, meekness, self-denial, and self-sacrifice became organized into corporations whose dignitaries have hardly been matched for arrogant grasping, using, and flaunting of power and wealth and for insistence on prerogative to the borderline of worship. One turns to Dostoievsky's famous speech of the Grand Inquisitor, for any adequate portrayal of this situation and its sinister indications of the nature of human nature.

The plea of Communism, like that of Christianity, is justice, under absolute authority, ignoring freedom. (The former does extol progress, and progress through science, both of which Christianity despised; by the same argument, Communism is overtly less devoted to law and tradition, more openly claims the right to ignore or break the law.) For Liberalism, the primary value is freedom, self-limited by laws made by the community, ideally by general assent, in practice by representatives

elected by a voting majority—one of its dangers. The laws of a liberal state will also be general, non-specific, but in a sense quite different from the Golden Rule or Law of Universal Love. The familiar figure is rules of the road, in contrast with instructions where and when and how to travel, whether arbitrary or conformable to a traditional practice. But such freedom must be sweepingly limited by measures not only of a "police" character in a broad sense, but also designed to equip the individual and family for social life by implanting wants and tastes in general conformity with the culture, and endowing with a minimum of productive capacity (or ultimately with final goods) without which freedom is a form empty of content. To take these units as "given" is flagrantly contrary to essential facts-of-life, and means ignoring the major social problem. It is along this line that 18th-19th century liberalism went to an extreme that has provoked a reaction which threatens to engulf all freedom, and justice too, in the modern conception of it, if not to destroy civilization. Liberal states have been engaged, however, through their short life, in correcting this imbalance between freedom and justice; and more intelligence, better judgment, is our need, rather than any radical departure in method.

The prime requisite is simply critical intelligence. And it may well appear as if the race at large hates this type of effort, naturally, instinctively. Anyhow, we have been conditioned in the opposite direction virtually throughout history, with the first breaking away from the ideals of conformity and submission to sacred law and authority during the past few centuries. The real heart of modern liberalism is a radical change: a virtual inversion in the conception of truth and believing, a transfer from a moral-religious to an intellectual-moral basis. What the world really needs to learn from science, for handling social problems, is not its techniques but its moral code. In the religious age, truth was absolute and belief a matter of right and wrong, hence, naturally to be controlled by reward and punishment. For liberalism, truth is always provisional, and rests on the "best" evidence—incidentally, not logical demonstration, but that is a long story. Right belief was a virtue, finally the condition of eternal salvation. The principle was stated, particularly with reference to our own religious tradition, by Lord Bacon: "the more absurd and incredible any divine mystery is, the greater honor we do to God in believing it" (and in similar terms by Tertullian, around 200 A.D.). Liberal moral values fit the same description as the liberal conception of truth; not virtue versus vice, but the best possible at any time and place. This means that the object of devotion and pursuit is not ends but ideals, progressively redefined as they are progressively realized, and always with the mode

and spirit of pursuit and definition—freedom, but under critical direction not caprice—as the most essential value.

A further consequence is that liberalism is fact-facing above all. It does not pretend that existing economic conditions are just, but recognizes that justice can be approached but never attained, and freedom likewise and any other social ideal in its ideal form. It just is not that kind of world. It is childish if not hypocritical to preach that all discord is harmony not understood, that "in erring reason's spite, One truth is clear, whatever is, is right," or accordingly, that omnipotent goodness and omniscience rule the world. As T. H. Huxley said, the ways of the cosmos are not our ways. Rather it is man's work to remake the world, as far and as fast as he can, according to his sentiments and ideals about which the Cosmos gives no evidence of the least concern—and to be careful not to defeat the whole project by trying to go too far or too fast with it. Also, to enjoy what goodness and beauty we can find, without letting these appreciations confuse and corrupt our judgments of truth. Any of my students or former students in the audience will please forgive me for repeating here a statement I often quote, from Clarence Darrow, characterizing divine justice. Said he, "God made one man a genius and the other a fool—which always seemed to me a raw thing for God to do—to the genius." Of course, it is a raw thing for both of them; but the world *is* like that, and we must take it or leave it. Nor is much freedom possible, either, in any social order, and notably in the large-scale organizations, efficient and yet constantly changing, that are required to exploit modern technology. You're in the army now, even in peacetime, especially in the mass-production industries. You can only be reasonably free to elect some other work, in view of the "net advantages." As to justice, other things are distributed even less in accord with merit than wealth and income, and we can do little against the monstrous vicissitudes and caprices of the natural world. To secure any form of social justice, we should have to begin with a much more equitable distribution of parents and more remote ancestors, and manifold other circumstances that largely determine the character of one's life long before birth. And even when one reaches the fullest responsibility, it is possible to have but a fraction of the knowledge necessary for really intelligent action. As to "happiness," it is easy to agree with Darrow, and Meredith, and many more, that the idiot or, as Whitman put it, the animals, have the best of it. But *that* happiness, at least, is not what makes human life worth while.

We must, as I have suggested, be good sports, enjoy the game whether we win or lose, not cheat even to win, and not even be too

sore when the opponent wins by a little cheating. And we must try, all along, gradually to improve the rules, as well as to obey and help enforce them. The main injunctions that can be given are negative, especially not to go too fast, not to oversimplify, not to grasp at easy solutions for hard problems. I think the greatest danger is that suggested by my text—a "moralistic" approach, attributing social evil to sin, with the implication of cure by liquidating somebody, or at least firing some scapegoat, and seeking a savior. People are not bad, in the main, but they are ignorant and do not understand. They have not been taught to approach problems in terms of knowing and understanding, but to obey some ancient rule, as interpreted by those in power, or follow some new prophet. Democracy calls for leadership, but that does not mean finding the right man or party and giving him or them irresponsible power. We surely know what a dictator will do, once in power; he will, indeed, use "science" to make everyone be good and do right.

I have used up my time without saying much about the alternatives to the free economy; but that would be an endless task, and also one for a corps of experts. Let me repeat that how people expect to cure the social ills by a radical shift from business to democratic politics is a question for which I see no answer except in terms of the psychology of romantic prejudice and screwy thinking. Most of the evils inherent in the market organization plainly inhere still more in political campaigning, legislative debates, and administration, perhaps even judicial trials. Especially the tendency to centralization and concentration of power—which can only go so far until voting and political discussion will be empty forms if the boss allows them to go on at all. Yet freedom is not enough; it was carried too far, and more and more political action is called for, though it is dangerous; if only it can be in the main right action, or not too far wrong! Democratic action is *hard*. It means government by discussion, and the organization of discussion itself, as I said before, involves the main problems. Not much intercommunication is even theoretically possible. As the world is built, the cards are heavily stacked in favor of centralization. Even in one direction, communication is bad enough; among economists, for instance, the typical reply to a criticism is, "but I didn't say that." I myself have been made a bad example for views I supposed I was arguing against all through the years. As to inter-communication—even with two persons there is an insoluble problem of dividing the time for both between speaking and listening; and it is said to give rise sometimes to friction, even causing dissolution of the holy marriage bond. With larger numbers, the limitation increases rapidly, in I know not what form of compound progression. One person can, indeed, be heard by a considerable number and, with mechanical aids now available, by "the world," as well

as reached by print—if so disposed. But, though no prophet, I will predict that no invention will ever enable one to listen or attend to more than one other at a time, or to "send" and "receive" communications at the same time.

To conclude: Time was, no doubt, when society needed to be awakened to the possibility of remedying evils, and stirred to action, mostly negative action, establishing freedom, but some positive action too. Now, we have found not only that mere individual freedom is not enough, but that its excess can have disastrous consequences. And a reaction has set in, so that people have too much faith in positive action, of the nature of passing laws and employing policemen, and the opposite warning is needed. At least so I hold; perhaps it is a prejudice —how can one tell?—I mistrust reformers. When a man or group asks for power to do good, my impulse is to say ,"Oh, yeah, who ever wanted power for any other reason? and what have they done when they got it?" So, I instinctively want to cancel the last three words, leaving simply "I want power"; that is easy to believe. And, a further confession: I am reluctant to believe in doing good with power anyhow. With William James, I incline to the side of "the slow and silent forces," slow as in all conscience they are—and though time is fleeting.

There is much more that should be said, but certainly not on this occasion. When I started this I knew, from experience, that I'd never finish it. Life seems to consist of "unfinished business." And, having already imposed on you too long, without waiting for the peremptory order that is given to naughty corporations, I simply cease and desist.

A PROGRAM FOR ECONOMIC MOBILIZATION

By EDWARD S. SHAW AND LORIE TARSHIS*

The program of economic controls recommended below is directed toward a solution of the problems that would be raised in a full-scale mobilization of our economy by 1955. The design of such a program should not be left to prejudice or tradition. It must be based instead on the requirements of mobilization and the operating characteristics of the mobilizing economy. In Section I we describe these requirements and the strains to which they would subject the economy as it proceeds to fill more and more military needs. In Section II we assess the merits of alternative programs. Our own recommendations are presented in Section III.

I.—*Tensions in the Mobilizing Economy*

We cannot and need not claim great accuracy for the estimates of this section. They are presented to give a rough impression of the economic tensions accompanying mobilization. Crude as they may be, they still afford an adequate base upon which to construct a control program.

Our model postulates full mobilization by 1955, the half-way point in 1953. At the peak the labor force is to contain the same proportion of those aged 14 and over as the British mustered in 1944, and hours of work are assumed to reach our own level of 1944. The armed forces in 1955 are to number 12 millions. In estimating gross national product, we suppose that productivity has increased, everywhere except in the armed forces, at an annual rate of 2 per cent since 1944. "Value of output" of the armed forces, measured by pay and allowances, is based on 1949 levels.

Our projection of gross national product, if mobilization follows the path we assume, appears in Table I.

The first objective of economic policy is implicit in these figures—

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TABLE I.—GROSS NATIONAL PRODUCT, 1951–56
(billions, in June 1950 prices)

Period	Gross National Product
Third quarter, 1951	$293
" " 1952	331
" " 1953	365
" " 1954	383
" " 1955	396
" " 1956	410

a rise of production of 50 per cent over 1950. Even with so considerable a rise, civilians would have to make sharp sacrifices. To get it, the labor force must increase by about four million over and above the number that would normally enter; the work week must be lengthened; restraints and bottlenecks that might lower productivity must be removed. All of this must be done despite the disincentive of declining real consumption.

We assume that at peak mobilization civilians will be held to 1939 consumption *per capita,* and government non-war expenditures, excluding transfer payments, to the same ratio of gross national product as in 1944. Private investment would be limited to replacement levels. The rest of output would be available for military use. Lacking space to describe or justify these assumptions for the peak year and related ones for prior years, we project the composition of gross national product as follows.

TABLE II.—COMPOSITION OF GROSS NATIONAL PRODUCT, 1951–56
(billions, in June 1950 prices)

Period	Private Investment	Government War	Government Non-War	Consumption
Third quarter, 1951	$50	$ 37	$23	$183
" " 1952	51	75	21	184
" " 1953	51	126	21	167
" " 1954	33	185	18	147
" " 1955	30	225	17	124
" " 1956	31	237	17	125

Such shifts as are portrayed here in composition of gross national product could occur only if policy permitted, encouraged, or compelled a rapid reallocation of resources. There will be no resources to spare upon misallocations that result either from inexpert regulation of aggregate demand and its patterns or from frictions in the mobility of resources. We must note the difficulties of providing adequate incen-

tives to reallocations when demands are liable to large and unpredictable changes and rewards in real terms are scarce.

In our model consumers would be held to $124 billions of consumption in 1955. But their incomes before tax would be about $309 billions. With taxes at our own 1944 levels, disposable income would be $260 billions, while with British wartime rates in effect, disposable income would amount to $208 billions. Growth in the savings margin over 1951-56 is forecast as follows.

TABLE III.—DISPOSABLE INCOME, CONSUMPTION, AND SAVINGS, 1951-56
(billions, in June 1950 prices)

Period	Consumption	Disposable Income		Consumer Savings	
		U.S. Tax Rates	U.K. Tax Rates	U.S. Tax Rates	U.K. Tax Rates
Third quarter, 1951	183	195	156	12	−17
" " 1952	184	218	174	34	−10
" " 1953	167	239	190	72	23
" " 1954	147	251	200	104	53
" " 1955	124	260	208	136	84
" " 1956	125	267	212	142	87

A small fraction of disposable income, possibly 5 per cent at the maximum, might be saved voluntarily and hence the inflationary gap might be less than the savings margin of disposable income over permissible consumption at stable prices. But it seems more likely that, in view of the shrinkage in real consumption and of the massive premobilization supply of liquid assets, consumers would sooner or later attempt to dissave. It is terrifyingly clear that an inflationary problem of such magnitude could not be solved by duplicating World War II controls.

A similar analysis for corporations shows that through 1953 private investment at the high rate we suppose necessary would have to be financed partly from external sources. Thereafter, even with taxes on corporate profits at 65 per cent, corporations would retain from current operations $5-10 billions annually in excess of their investment quota. Obviously, powerful restraints to limit investment would be needed.

The government sector would show increasingly large deficits once mobilization had gained speed. With taxes set at our own 1944 rates from 1951 on, the aggregate deficit in 1951-56 would be $450 billions: in 1955 alone it would be $145 billions. With British wartime rates in effect from the beginning, the aggregate deficit would come to $240 billions: in 1955 it would be $108 billions. Evidently such very large increases in public debt would be in prospect that we should doubt the

capacity of conventional finance to cope with them. If their counterpart were to be, as in World War II, an equal accumulation of liquid assets by consumers and firms, we feel sure that the mobilization itself would be gravely in peril and that a disastrous inflation would be inevitable either during or after the war crisis.

If the pattern of personal income distribution remains the same as in recent years and if personal taxes are levied at either our own or British wartime rates, the distribution of disposable personal income excluding military pay and allowances will be approximately as follows.

TABLE IV.—DISTRIBUTION OF DISPOSABLE INCOME, 1955
(in June 1950 prices)

Decile	Aggregate Disposable Income		Disposable Income per Spending Unit	
	U.S. Tax Rates	U.K. Tax Rates	U.S. Tax Rates	U.K. Tax Rates
Top	$67 billion	$50 billion	$13,330	$9,955
2nd	34 "	25 "	6,800	5,097
3rd	29 "	21 "	5,850	4,221
4th	24 "	18 "	4,825	3,696
5th	21 "	17 "	4,236	3,345
6th	18 "	14 "	3,567	2,872
7th	15 "	12 "	2,932	2,426
8th	12 "	10 "	2,377	2,045
9th	8 "	8 "	1,621	1,507
10th	3 "	3 "	540	540

Even after taxes at wartime levels, it is apparent that households in the top three or four deciles of the income distribution would be capable of taking from the markets the entire output of consumption goods without drawing on liquid asset accumulations. Society simply could not sanction such inequality in real consumption. Yet, if an attempt were made to equalize consumption by taxing, marginal rates would have to be impossibly high—90 per cent and more for incomes above the median. Equalizing consumption by devices of compulsory saving would result in grossly unequal accumulations of financial assets and a radical change over the mobilization period in the inter-personal distribution of wealth. Economic policy will need to be cleverly and powerfully designed indeed if it is to steer us clear of all the perils we face—inflation, inequitable distribution of consumption, decay of production incentives, and maldistribution of wealth.

II.—*An Appraisal of Alternative Programs of Control*

Two programs of economic control during mobilization, alternatives to the program we propose, merit special consideration. One, the *dis-*

equilibrium system of controls apparently is in general favor and is being re-established. The other, the ***pay-as-you-go program***, has strong backing among economists. Either may be rejected only for compelling reasons.

Our feeling is that a decisive case can be made out against both the disequilibrium system and pay-as-you-go. Neither has adequate potentialities for bringing into use all of the economy's resources, for allocating these resources efficiently among alternative uses, and for distributing the output properly among claimants. The purpose of this section is to indicate why this seems to be so and why it is imperative to develop a program of controls that is more suitable to the mobilization of the 1950's.

The Disequilibrium System

Description. The disequilibrium system, as the name suggests, does not seek to maintain aggregative equilibrium over the whole economy or in any of its broad sectors. It tolerates a very large excess of disposable income over permissible consumption at stable prices. The rapid accumulation of consumer savings, and corporate savings as well, takes the form of whatever liquid assets the public may prefer—money or marketable and redeemable securities.

As rising incomes and accumulating liquidity stimulate demand, price inflation here and there or everywhere is stopped by decree—by holding the line, by freezes and ceilings and rollbacks. As excess demands appear at ceiling prices, they are dissipated by formal or informal rationing, priorities, defense orders, allocations, and limitations. The answer to deficient supplies is sometimes subsidies or production on government account. Short supplies may be apportioned in critical cases by an allocation system such as the Controlled Materials Plan. Elsewhere allocation of resources and distribution of output is achieved by the primary pricing system, crippled and limping as it is from the freezing process, and by administrative mandate. Briefly, the disequilibrium system generates an inflationary gap; negates its inflationary effect on prices by imposing ceilings; and overcomes the distorting effect of frozen prices on real phenomena by direct controls.

Advantages. The merits of the disequilibrium system are substantial. For one thing it is a familiar system, and perhaps it can be re-assembled quickly and efficiently from the blueprints of World War II. It can be imposed piecemeal, to deal with each emergency of excess demand. The public approves its apparatus of ceilings and freezes, likes the simple equity of formal rationing, and considers it right and ethical to take the profits out of war with an excess profits tax.

The accumulation of liquid assets provides incentive, as tax receipts

or illiquid savings may not, to offset the inevitable reduction in current real consumption. The Treasury has access to cheap financing, and high levels of income are assured to financial institutions. If the price line is held, labor may be persuaded to moderate its wage demands. Eventually, the disequilibrium system can be counted upon to culminate in some price inflation and sufficient forced savings to ease the burden of public debt and overcome the danger of post-crisis deflation.

Especially in the military sector of the economy, the allocation of resources may be improved by direct controls. In this sector the price-income mechanism is relatively inefficient in diverting a sufficient quantity of the right resources to the right places. The disequilibrium system guards against excessive reliance on the price-income mechanism alone. Our view is that it *over*-guards, using formal allocations not so much to supplement the operation of the pricing mechanism as to supplant it. It dispenses unnecessarily with the help that the pricing mechanism could give.

Disadvantages. The disequilibrium system of controls was not an unqualified success in World War II. Excess demands did appear on the majority of markets. The result in some cases was outright price inflation. In other cases, inflation was more subtle and took the guise of quality deterioration, withdrawal of low-end items, overfabrication, and *sub rosa* bonus arrangements from buyers to sellers. The administrative apparatus grew alarmingly. The lightly repressed inflation brought the various agencies to loggerheads, so that stabilization agencies and mobilization agencies seemed to be natural enemies, though logic suggests that they should be natural allies. There was an unpleasant aftermath of postwar problems—inflation, the emasculation of monetary control, and the uneven accumulations of liquid wealth.

Still, circumstances were favorable for the disequilibrium system in 1940-45. Real consumption was high and rising, and the generous levels of real consumption stimulated the demand for liquid savings. The initial stock of liquidity was not large, and stable price expectations made the public tolerant of considerable additions to it. The public was depression-minded and there was no widespread suspicion that inflation would or could confiscate real savings.

For 1950-55 the prospect is quite different. Real consumption will decline. Existing stocks of liquidity are enormous and, even if taxes are raised to British levels of 1944, the liquidity increment will far surpass the record of World War II. It would be naive to suppose that the public has learned nothing about the hazards of inflation since 1945 or that price expectations are and will remain inelastic. In 1950-55 the supply of liquidity will expand very much more rapidly, as our data in Section I on the savings margin suggest, and the demand for it will

be much less intense. If the disequilibrium system is reinstated the only possible results, it seems to us, will be first a more rapid growth of excess demands than in 1940-45, then a more rapid mushrooming of direct controls, and finally a breakdown of price ceilings and direct controls as accumulating liquidity loses incentive value and leaks to the markets through chinks in the wall of controls. The disequilibrium system represses inflation much too lightly.

Once inflation gains headway, the opportunity to earn liquid assets will not attract an adequate labor force or stimulate an appropriate aggregate or pattern of capital formation. That is to say, the disequilibrium system would hamper recruitment of necessary real resources.

Even if the price line were to be held, the disequilibrium system would not allocate resources and distribute output optimally. The price-income mechanism would be frozen so that it could not reflect changing patterns of demand and changing stresses of supply. Substitutes for it, like the Controlled Materials Plan or point prices for consumer goods, are much too cumbersome to reach beyond a small segment of the economy. Most allocation of resources and distribution of output would necessarily be carried on by a maimed pricing organization and such unofficial arrangements as buyers and sellers could work out for themselves.

There is space here to recount only a few of the ways in which the disequilibrium system can hamper allocation of resources. Excess demands on normal civilian markets discourage diversion of resources to military output. New investment for military markets is handicapped when there is a persistent sellers' market for civilian output. Since relative intensities of consumer demand are concealed by frozen prices, consumer wants can play no direct rôle in determining which resources should be surrendered to rearmament. The pattern of civilian output does not reflect relative intensities of consumer demand, but instead relative mark-ups that are permissible under price-control regulations. With resource prices frozen, producers economize in resources which were expensive when ceilings were imposed rather than in resources which become expensive through the course of mobilization. Frozen resource prices in the military sector encourage excessively costly specifications for military items by concealing real scarcities. Especially in combination with the excess profits tax, they do not compel producers in the military sector to conserve resources to the utmost or employ them in the most efficient ways.

The disequilibrium system is equally maladroit in respect to the distribution of output. Specific and even group rationing makes quite inadequate provision for differences in buyer tastes. Consumption in

standard portions may be tolerated when relatively few goods are concerned and when the general living standard is rising. When real consumption is shrinking, it becomes gravely objectionable. Still, it probably is less objectionable than the haphazard distribution of informal rationing or of black markets. In view of the administrative complexities of specific or group rationing, we should expect only a few wage goods to be covered by it, and even then the administrative cost is bound to be enormous.

Our objections, then, to the disequilibrium system are that it represses inflation too lightly; that it tends to depress incentive and the aggregate of output; that it allocates resources inefficiently and distributes output unsatisfactorily. Its administrative apparatus is cumbersome, tightly centralized, and inflexible. It is least objectionable in a brief, once-and-for-all mobilization of the World War II variety. We can hardly imagine that this performance would be tolerable in a long and possibly oscillating mobilization of the type we may be in for now.

The Pay-as-you-go Program

Description. The pay-as-you-go program would use stepped-up conventional techniques of fiscal and monetary policy to close the inflationary gap. With the gap closed, it would rely mainly on the functioning of the pricing system to allocate resources and distribute their output. Pay-as-you-go would nip inflation at its source of excess supplies of disposable funds, obliterate excess demands at stable prices, and prevent the amassing of liquidity that could imperil stabilization both during and after the crisis.

With inflation prevented, there allegedly is no reason to impose controls over prices, no reason to ration, no reason to allocate resources directly, and no reason to limit administratively the production of specific goods. The profit-seeking proclivities of business firms would lead to an optimum use of resources. The pricing system, sheltered from inflationary distortions, can do better and more cheaply what the disequilibrium system would do by fiat and specific order. The distribution of output would conform to pressures of the tax and credit system, and it could be made to give any desired result.

Advantages. Pay-as-you-go has much to recommend it. Administratively, it is relatively simple: to tax, to sell securities, to tighten the money markets does not require any such administrative paraphernalia as is necessary to manage the disequilibrium system. New control apparatus is not needed. Each firm is its own War Production Board. The controls are flexible, since taxes and interest rates or capital rations and savings quotas can be raised or lowered as the need to do

so arises. Decentralization is easy, and the scheme lends itself to the needs of the reconversion period for which it leaves no embarrassing debris of excessive liquidity and complex direct controls. It ensures that resource allocation will be no worse than that which the pricing system itself achieves. It does not distribute output arbitrarily, and it gives full scope to the variety of consumer taste while putting down the abuses of gross interpersonal inequalities in buying power. It keeps the normal processes of the economy active and healthy, so its adherents argue, and hence abnormal administrative supervision is superfluous.

Disadvantages. Our belief is that pay-as-you-go cannot cope with a major mobilization. Even at moderate levels of mobilization, marginal rates of income taxation would have to be prohibitively high to keep disposable income on a line with permissible consumption at stable prices. At peak mobilization, the average tax rate would have to be 60 per cent of personal income. To prevent excessive inequality in consumption out of income alone, the marginal rate would need to be about 98 per cent for the top decile of income recipients and over 90 per cent for the sixth to ninth deciles. It would range from 50 per cent to 78 per cent for the third to fifth deciles. However, it is clear that, even at this level of taxation, consumption would be distributed so inequitably as to endanger the war effort. The reason is that consumers in high-income brackets now have enough liquid assets, and access to still more, to defend living standards against virtually confiscatory income taxation. Families in the top decile, who now hold about $45 billions in liquid assets, could consume at their present levels for a year or so even if taxes did take *all* of their income. Their spending would inflate price levels, and worse still, give rise to a gravely inequitable distribution of real consumption.

Our conclusion is that the severe tax program of pay-as-you-go would not contribute to an effective war effort. It would sap incentives to employment, to overtime labor and working efficiency, and to efficient, intensive use of managerial and plant capacities. It would encourage tax evasion, stimulate dissaving, and distribute consumption unfairly. Low morale and labor unrest would result from the shift of a larger share of declining aggregate consumption to families with the dual advantage of high incomes and high liquidity.

Part of the responsibility for damping inflation might be put on compulsory savings devices. One difficulty is that schemes for compulsory saving which are suitable to pay-as-you-go cannot be enforced effectively. Old savings can be reported as current savings, and in many instances the misrepresentation cannot be detected. If income is the basis for defining minimum savings, the requirement can be evaded

in many cases by under-reporting of income. Unless compulsory saving is managed somewhat as our proposed program suggests, it is not an efficient limitation on consumption and it reduces the efficiency of taxation. A second difficulty is that compulsory saving would not immobilize the liquid assets that are now so tightly concentrated in the upper reaches of the income scale. These assets would still be available to commandeer for their owners an intolerably large share of consumer supplies.

Pay-as-you-go wisely condemns the principle of freezing prices and the direct controls that either make the freeze effective or serve as substitutes for price-income directives. It seems to go too far, however, in rejecting also direct controls that supplement the price-income mechanism. Our impression is that the price-income mechanism unaided cannot mobilize and transfer resources quickly enough to meet mobilization requirements. Its signals to labor and management, particularly when tax rates are very high, would be too weak. Again, the price-income mechanism, in an atmosphere of uncertainty and conflicting expectations, may misdirect investment activity. Real losses from this source could not be afforded in peak mobilization.

In the military sector the misallocation of resources by the price-income mechanism would be especially costly. Rapidly changing requirements, unfamiliar products, strong monopoly power of the seller, weak budget restraints upon the buyer, contracts which reduce incentives to efficiency—all of these features would interfere with the proper allocative function of the pricing system. When, in addition, the incentive to follow the signals given by price is weakened by very high marginal tax rates, the situation seems hopeless. Our conclusion is that pay-as-you-go falls short of attainable standards in allocating resources as well as in stimulating the supply of resources and in distributing their output.

Conclusion

The faults we find with the conventional programs extend to all economic objectives of mobilization—supply, allocation, and distribution. Yet the disequilibrium system has been used with fair success in other mobilizations, and pay-as-you-go has succeeded many times in checking inflation. If they cannot be recommended now, it suggests that in certain important respects the problem is new. There are indeed novel features which give rise to the need for stronger controls.

One of these features is the already very large stock of liquid assets outstanding. It amounts to about as much as the annual quota of consumer goods at the mobilization peak. If taxes are set at our own 1944

levels and savings distributed as they were in 1944, liquid assets would amount by 1955 to almost $500 billions, or four times the annual quota of consumption. Such a vast potential spending power threatens inflation of no small order. The cure, if it is not carefully chosen, may be worse than the disease.

A second feature is the enormous gap which can exist in our very productive economy between personal income at the mobilization peak and an adequate allowance for consumption. According to our model, the gap would amount to $185 billions in 1955, about 47 per cent of the gross national product. So great a gap evidently complicates every aspect of the control problem immensely.

A third feature, which we could neglect in the 1940's is the widespread expectation of inflation. It makes the accumulation of most financial assets a great deal less attractive than in the last mobilization. And it makes the provision of adequate incentives to productive effort a considerably more difficult problem.

A fourth feature is that the mobilization ahead may be much more exacting and complex in its pattern than any previous one. The prospect is that real consumption will fall, not rise as it did in 1940-45. The prospect also is that the mobilization will not be a single flexing of our muscles over a short time interval. Control mechanisms should be capable of dealing with a mobilization which, over some much longer period, will run an oscillating course from moderate to high levels. Obviously, too, they should be adapted to the need for decentralization when and if the economy is attacked.

To build supply, to facilitate swift and proper resource allocations and to divide the output properly in the face of these unprecedented difficulties, calls for a program that is more powerful and more sensitive to the wants of civilians than either the disequilibrium system or pay-as-you-go.

III.—*An Alternative Program*

In the program of controls we are proposing here, there are elements of pay-as-you-go and of the disequilibrium system too. It includes other control devices that economists have considered at one time or another. Part by part the program is not novel, but as a whole it does seem to be rather more powerful, flexible, and sensitive than other programs that have been recommended for economic mobilization in the present crisis.

Controls in the Consumer Sector

Expenditure Rationing. The burden of mobilization will bear hard on consumers in real terms. In money terms, on the other hand, the

prospect is for rapid inflation of personal incomes and even of disposable incomes unless taxes are to become significantly more severe than in the United Kingdom during World War II. Mobilization, then, will generate excess money demand for consumer goods and precipitate inflation unless sound precautions are taken. We are proposing that excess money demand at a stable cost of living should be removed by expenditure rationing, that is by administrative stipulation of the total spending budget of each consumer household.

In the few paragraphs below we present a rough blueprint for one technique of expenditure rationing. Many of its details are omitted here. There may well be other techniques as feasible as this one or more so. Even though we may not have hit on the best way to ration spending power, a description of this method may prove that there is a practicable way.

A Ration Authority would publish a ration table shortly before each quarter-year, allocating the permissible aggregate of consumer outlay at a stable price level. Except in a siege economy, the allocation would not be egalitarian. It would be regressive among consumer units by income level on a *per capita* basis. It might discriminate in other ways, perhaps according to source of income or on a regional basis.

Each consumer unit could ascertain from the table its maximum budget for current outlays in the quarter ahead. But the household could not spend until it had received its ration permit from the Bureau of Internal Revenue. This permit would be a receipt for payment of income taxes in a recent period and would indicate the consumer's income level and other data that might be relevant in fixing his classification in the ration table. The consumer would present his permit to his bank, the bank would compute his ration and note its amount in his current (white) bank account.

The ration would put a ceiling over current spending, but the financial power to spend would arise from current credits to white account. In principle, all income payments to consumers and no other payments should count as current credits, though provision could be made easily for white credits from consumer loans.

Each household would also have a financial (black) account with its bank. All currency outside banks, in denominations perhaps of $5 and over, would be called in, credited to financial accounts of consumers or firms, and cancelled. Traditional bank deposits would be deemed financial credits, ineligible for spending in the income circuit except for an initial allotment of working balances to current account. Other credits to financial account would arise eventually from sales of capital assets and other transactions in the financial circulation. At the close of each ration interval, unused credits on white account would normally

be transferred to black account and thereby blocked from the income circulation.

Each consumer could buy with white credits a ration currency book containing coupons in denominations, say, of $1 to $5. His outlays on consumption could be either in these coupons, in checks on white account or in coins. Both the coupons and the checks should be negotiable only once. Consumers could draw on financial accounts for payments by distinctive checks of taxes, mortgage obligations, and the like. The important consideration is that these black balances should not be effective purchasing power against current output.

Retailers would deposit sales proceeds to their own current (blue) accounts in commercial banks. These credits would be used to meet current operating expenses. They would be the basis for fixing the retailer's own allowance for replenishment of inventory and possibly for new plant and equipment. Wholesalers and even manufacturers of consumer goods could be brought into the rationing program by extending to them the distinction between blue accounts and financial (red) accounts. Use of the latter would be restricted to financial transactions outside of the income circuit.

The whole of consumer outlay should be subject to the expenditure ration. Both house rents and purchases of durable goods can be fitted in. Each house-owner should register his property with his bank, and the property should be assigned a standard rental that the bank would determine from a formula set down by the Ration Authority. This figure would be charged against the house-owner's expenditure ration, and the charge would be an inducement to him to rent his property in exchange for white payments from tenants. His rental income would entitle him to recover the assessment against his own expenditure ration. The standard rental might be set high for congested areas and lower elsewhere, and it might be adjusted according to changes in the housing situation. This plan does not call for rent ceilings: its purpose is to hold down rents by stimulating the supply of housing as well as by limiting the spending power of tenants.

Credit facilities from current savings could be arranged for retail transactions in durable goods. Credit terms would tend to be very stiff, since loan funds would come only from households spending below their expenditure rations. This constraint on credit should encourage rentals of durable goods and a more intensive use of the supply in existence.

Granted that expenditure rationing is practicable—and we are convinced that it is—the scheme is very attractive in principle. It enforces monetary equilibrium in the sector of the economy that includes consumers and their suppliers. There the flow of money expenditures is

balanced against the value of current output at a stable price level. Given over-all budget restraint and monetary equilibrium, there is no need whatever for price controls in the consumer sector and hence for specific or group rationing and their arbitrary standardization of consumption patterns. Once the price level is anchored, relative price adjustments can pursue their peacetime rôle of clearing the market for individual goods, of allocating resources between consumer industries, of distributing output between consumer households.

The regressive linkage between personal incomes and expenditure rations would prevent inequitable distribution of real consumption. At the same time it would provide a powerful incentive, in terms of marginal gains in real consumption, for mobilizing the labor force and employing it efficiently where demands are most urgent. The housing program compares more than favorably with rent ceilings as a device for making living space available on reasonable terms. The possible linkage between sales volume and private investment promises to put firms on their toes as they need not be in the sellers' market of the disequilibrium system. As a means of mobilizing resource supplies, allocating them efficiently, and distributing their output suitably, expenditure rationing is a superior device.

Expenditure rationing is flexible. The Ration Authority could adjust effective demand to the phase of mobilization by its quarterly adjustments in the ration table. It could manipulate incentive allowances in the ration table to mobilize factors in critical production areas. It could manage the flow of investment in the consumer sector by quarterly adjustments of inventory allowances. The Ration Authority itself would not be an unwieldy agency, and the bulk of administrative responsibility would fall on peacetime agencies, particularly the banking system and the Bureau of Internal Revenue. Administration would be widely decentralized and relatively invulnerable to the hazards of defensive warfare.

Expenditure rationing, income taxation, and wartime savings programs are natural allies, each complementing and strengthening the other. If the ration were linked to income reported for tax purposes, tax evasion would diminish appreciably. And tax assessments could be a forbidding penalty for persons or firms that would seek to inflate spending rations by over-reporting income. Credits in black balances could be absorbed with relative ease into illiquid issues of government securities.

Selective Controls in the Consumer Sector. Expenditure rationing would be an efficient control over aggregate consumer demand. But in some circumstances patterns of consumer outlay and real consumption might not respond in the way that would work out best for the war ef-

fort. Then we would recommend selective controls in the consumer sector. Selective excises would have a rôle to play, in expediting transfer of resources to military output, in stimulating production of wage goods at the expense of luxuries, in supplementing selective credit controls to damp demand for durables. There is a job to be done also by stop-orders and limitations, by subsidies for conversion to utility goods, and other devices that would supplement the effect of relative price changes in adapting supply and demand to wartime conditions.

Personal Income Taxation. The function of personal taxation should be not to repress consumption but to shrink the savings margin of personal income over consumption—to mop up black rather than white balances. For wartime this amounts to saying that the principal rôle of personal taxation should be to yield revenue and restrain the public debt. The tax program can also discriminate between households according to their share in the war effort, providing a rational scheme of production incentives. And it would be an essential instrument for enforcing rules of expenditure rationing.

It is important to decide quickly on the shares of the savings margin that are to be taken away by taxes and by government borrowing. There are three reasons for relying principally on taxes. First, in a long mobilization a huge accumulation of financial assets would undermine production incentive and price stability. Second, financial assets would tend to accumulate very unevenly between income classes. Third, an enormous bulk of public debt would jeopardize postwar recovery and stabilization. On the other hand, there are limits to a tolerable tax burden, since the public regards savings as an element of real income and as a reward for productive effort. It is difficult to say what the balance of borrowing and taxation should be, but our own judgment is that personal taxation here at rates as high as prevailed in the United Kingdom during World War II would affect real output very adversely. A special advantage of expenditure rationing is that it dams up inflation while the appropriate balance of borrowing and taxation is being worked out.

Tax yield should be increased from peacetime levels by broadening the tax base as well as by raising rates. A larger portion of personal incomes can be made taxable by reducing evasion and by conceding less generous exemptions and deductions from income that exceeds the expenditure ration. The personal tax base may also be redefined to include capital gains, some imputed incomes, and corporate savings.

It is proposed that corporate profits, whether distributed in dividends or not, be taxed as personal incomes of stockholders. Each corporation should certify to the Bureau of Internal Revenue each stockholder's share of earnings and should withhold taxes on these earnings

at a standard rate. The stockholder would pay additional tax or qualify for tax rebate, depending on the ratio between the flat corporate rate of withholding tax and the rate of personal tax that would be applicable to his own income including corporate earnings. On the assumption that judicial assent could be obtained for this proposal, the control program omits a progressive corporate income tax and excess profits tax.

Since savings will accrue at a highly progressive rate along the income scale, personal income taxes must also follow a very progressive pattern. But highly progressive rates of tax imply also high marginal rates of tax. Fortunately there are ways of granting tax concessions to increases in income that reward more productive effort. For example, income increments may be exempted from tax altogether or treated to preferentially low rates for varying periods of time.

Controls over Personal Savings. Controls over savings that survive taxation have a fourfold objective in wartime: to contribute to price stability during mobilization; to provide production incentives; to simplify federal debt management; to promote post-crisis stabilization. In view of the anticipated savings accumulation in the years ahead, it would be unwise in the extreme and incompatible with these objectives to try again World War II techniques of channeling consumer savings into liquid assets. In the main they must be enticed or driven into illiquid form.

We suggest that purchasing-power bonds be alloted regressively along the income scale, to absorb perhaps one-half of aggregate personal savings. These bonds would bear no interest; they would be negotiable except to banks; they would preferably be redeemable only on call by the Treasury, though some more explicit maturity might be needed for adequate voluntary subscriptions. Their maturity value would be issue price adjusted in some degree for change in the cost of living. Subscribers to these bonds would be assured stability in the real value of their savings rather than a return of interest or a guarantee of liquidity. It is recommended that personal savings not taken up by purchasing-power bonds be forced into annuities that would amount for all practical purposes to long-term refundable tax receipts.

Various advantages can be cited for these savings controls. They would not generate the threat to stabilization that is implicit in the liquidity accumulations of the disequilibrium system. Purchasing-power bonds should be so attractive that they could be allocated at least in part on an incentive basis. The bulk of them would be allocated regressively by income level and would hence be useful in limiting the wartime increase in wealth inequalities. In the postwar period they would tend to restrain both inflation and deflation. During inflation

they would appreciate in money terms and limit dissaving. In deflation they would depreciate in money terms and encourage dissaving.

Controls over Non-Financial Business Enterprise

Business spending on current inputs and on capital formation must be held in bounds. One way, of course, is to limit the budgets of customers—through expenditure rationing for consumers and comparable controls on other classes of final buyers. Another way is to limit self-finance and borrowing. Self-finance can be regulated efficiently by the division of business cash balances into current and financial accounts, with release of funds from the latter being governed by the Ration Authority for consumer-goods industries and appropriate authorities in other fields. Borrowing should be restrained by capital rationing and by interest rates very considerably above current levels. Business spending can also be limited by taxation and savings controls. Our suggestion on the tax front is a flat-rate corporate income tax, which would be essentially a device for collecting personal income taxes from stockholders. Corporate savings that are superfluous for the capital formation program should be diverted into illiquid securities including purchasing-power bonds and annuities.

Business in the Consumer Sector. A control program should exploit the price-income mechanism, when prices are adequately protected from a generalized excess of demand, for regulating both the aggregate and the pattern of current business outlays in the consumer sector. But opportunity would arise, too, to impose selective controls when the price mechanism works slowly or perversely. Excises, conversion subsidies, and tax concessions, for example, could speed increases in output of wage goods or utility goods and stimulate concentration of civilian outputs for the sake of cost economies. If important firms should defy price directives, it might be necessary to resort to stop or set-aside orders, or to encourage competing firms with inventory concessions, perhaps, or military contracts. We wish to emphasize that many of the World War II controls would not be necessary or even relevant in the context of expenditure rationing; for example, price ceilings, specific rationing, grade-labeling, price-line limitations, and production subsidies.

Capital Formation. There should be an Investment Board, authorized to design and implement a program of capital formation. At least until hot war comes, capital formation must be raised above its current share of the national product and directed to points of critical shortage. To a degree the price-income mechanism would induce optimum aggregates and patterns of capital formation, but the Board would need also to rely on direct stimuli and restraints.

Allocation of resources for capital formation in the consumer-goods sector would be small and could be delegated to the Ration Authority. The lion's share of investment would be in the military sector, and responsibility for it should be on the Investment Board when financing is private and on the Procurement Agency when public funds are to be spent.

Excessive capital formation could be checked by capital rationing and monetary controls, by limitation orders, and by variants of the Controlled Materials Plan. Capital formation could be stimulated in various ways, including risk-participation, governmental investment preferably on a much smaller scale than in World War II, construction subsidies, and tax adjustments. But the Investment Board should avoid the misapprehension that funds are not a scarce resource during mobilization. They must be in limited supply, in any sector of the economy, if inflationary pressures are to be bottled up. Dollars must be conserved to ward off the distorting effects of excess demands on patterns of production.

Controls in the Military Sector. In the consumer sector we would depend primarily on indirect controls of an unconventional type. In the sector concerned with supply and requisition of military goods, the price mechanism is inherently less efficient and must be supplemented with more powerful direct controls. Still, we urge rigorous budget restraint on military procurement and assignment of responsibility for military buying to a civilian Procurement Agency.

If the price-income mechanism does reveal marked shortcomings in allocation of resources in the military sector, the Procurement Agency should impose a limited system of direct allocation in the form of a Controlled Materials Plan. This device at least minimizes production of the wrong things, although it does not provide strong incentives to produce the right things. It can be very useful if it is not extended to more than a few materials and if materials requisitions of armament producers are competently policed. Perversion of the price-income mechanism and of the Controlled Materials Plan can be limited, too, if procurement contracts can be put generally on an incentive basis. Finally, it may be necessary to give the Procurement Agency standby powers to impose price ceilings selectively where advantage is obviously being taken by the supplier of his superior bargaining position.

Wage Policy

How money-wage rates should behave in the consumer sector can be deduced from the rule that the cost of living should be stabilized: efficiency wages, too, should be stable. However, formal wage ceilings should not be imposed. Other prices would not be frozen, and wages

in common with other prices should be a principal instrument for allocating our scarce resources to their most urgent uses. Labor would properly resist discrimination in this respect, and administration of wage ceilings in a mobilization of the scale we have discussed would be expensive and clumsy in the extreme.

If organized labor demands and gets increased efficiency wages, the Ration Authority might respond in either of two ways. To prevent an increase in consumer prices, it might reduce the aggregate expenditure ration, but this would precipitate unemployment. The Authority might better raise its target level of the cost-of-living index and point out that labor's monopoly powers had subjected the rest of the community to a loss of real savings and, by the operation of the ration table, to at least a relative loss in current real consumption. There seems to be no more effective way of forestalling excess wage demands than to mobilize general opinion against wage and price inflation.

A Wage and Manpower Authority, not incorporated in the Department of Labor, should be delegated responsibility for labor mobilization, a more intense labor effort, and the transfer of manpower to suit changing patterns of demand for output. It might resort to tax and ration incentives, to training programs, and to other means for assembling an adequate and properly distributed labor force. It should be able to force dishoarding of manpower where loose procurement practices permit it to occur, to settle critical disputes with compulsory arbitration, and in dire emergency to impose a labor draft for limited periods. If the general excess of demand for current output could be destroyed, the Authority should not be plagued with the conspiracies between labor and management to upset wage and price stability or to employ labor in relatively inefficient ways that characterized our experience in World War II.

Management of the Public Debt

If mobilization were to take the course we have sketched in Section I, and if tax rates were not raised above our own 1944 levels, the public debt would approach $750 billions in 1956. Even at 1944 British tax rates the debt could mount to $500 billions in mid-1950 purchasing power. Distressing problems of debt management may be in store for the Treasury both during and after mobilization.

It would surely doom stabilization now and later if the Treasury decided to borrow in the fashion of World War II, by issuing liquid low-yield securities. So we have suggested issue of purchasing-power bonds and annuities that would not be close substitutes for money. Debt outstanding now should be made illiquid, partly by a sharp upward adjustment in interest rates and partly by freezing bank port-

folios of government securities in a bond reserve. It is vital that Treasury securities should find their way to firm hands, and a considerable rise in interest expense to the federal government would be a cheap price to pay for this achievement.

If the debt should rise $450 billions by 1955 and if it were managed as in World War II, the public would be treated to an avalanche of liquidity. For all practical purposes, liquidity would become a free good—at 1950 price levels. Even long-term rates of interest would tend toward zero, unless inflation intervened. This prospect is much more worrisome now than it might have been in 1940, when so many of us were concerned over tendencies toward stagnation in the economic system. There is no chance whatever that propensities to spend would be so low after mobilization in 1951-56 as to neutralize the inflationary potentialities of nearly free access to spendable funds. Unless there is a change in debt-management policy or unless the price mechanism is indefinitely either frozen by direct controls or safeguarded by expenditure rationing, a major mobilization is bound to terminate in hyperinflation.

Monetary Controls

In recent years the banking system has been residual buyer of government securities at low rates of interest. In effect, it has resigned authority over the money supply to sellers, including the Treasury, of government securities. So elastic a monetary system should not be tolerated in a mobilization crisis. Severe new restrictions should be placed on commercial banks. All commercial banks should be brought under federal regulation. A marginal reserve requirement of 100 per cent should be imposed on demand deposits. The commercial banks' current portfolios of government securities should be converted into a new form of security, eligible for banks only and redeemable at the Federal Reserve.

There should be a Monetary Council, perhaps with the Board of Governors as its nucleus, with jurisdiction over the commercial banks, the Federal Reserve, and management of the public debt as well. Monetary policy will be so conditioned by the size and rate of growth in the debt that it will be inviting trouble and confusion to keep monetary management and debt management separate.

After a long, hard mobilization, the public would have very large amounts of blocked balances, purchasing-power bonds, annuities and conventional forms of public debt. The job then of the Monetary Council would be to schedule the liquidation of these claims equitably and at a rate compatible with general economic stability.

Administrative Considerations

This program of controls calls for a Mobilization Authority to apportion the national product between classes of final buyers and to coordinate administration in each sector of the economy. The Ration Authority, Investment Board, Procurement Agency, Wage and Manpower Authority, and Monetary Council would be subordinate agencies, on a common level of authority over their several spheres of influence.

This administrative design would have a number of advantages. It should be simpler to assemble and disassemble than the administrative apparatus of the disequilibrium system, since to a large extent it would exploit peacetime agencies. It should be simpler to decentralize and cheaper in skilled manpower, since the scheme of controls relies heavily on the decision-making of buyers and sellers and the price mechanism. There is less potential conflict between agencies, and a lower casualty rate among agencies and administrators, since this technique of control does not create the antagonism between mobilization and stabilization that is characteristic of the disequilibrium system.

Timing of Controls

If progressive mobilization is coming, expenditure rationing and the allied controls should go into effect as soon as generalized excess demand puts in its appearance. The disequilibrium system or pay-as-you-go would suffice, to be sure, at low levels of mobilization, but it would be advisable to implement the more powerful regime of controls at an early stage so that the public and the administrative agencies could become accustomed to it under relatively favorable conditions. If a long mobilization is likely, at rather low and oscillating levels of military spending, the disequilibrium system and pay-as-you-go might do indefinitely. But the probability is so high that both of them would permit a creeping inflation and constrain productivity, that again early recourse to the proposed program can be urgently recommended.

GENERAL STRATEGY OF ECONOMIC POLICY FOR LESS-THAN-TOTAL WAR*

By ALBERT G. HART†

As the title stresses, this is not a paper about total war. Neither is it a paper about pussy-footing strategy. It deals with a problem which in many ways differs from either. The best label I can put upon it is all-out *readiness*.

Maybe we will be in all-out war by the time this paper is printed; maybe not for years; maybe never. Without guessing at the relative probability of these contingencies (on which an economist is no expert), I propose readiness rather than all-out war as the proper hypothesis for this discussion. This is partly because the differences between the two models need exploration, partly because of the lay of the facts. Whether we will have war—and if so when—is for Russia to decide. If war is merely likely, rather than certain, full mobilization may be a trap, as Secretary Marshall has lately pointed out. The strain of full mobilization is such that we could be worn down rather quickly just by keeping 10 or 12 million men in uniform and making the corresponding economic adjustments. Besides, it takes a clear-cut state of war to make full mobilization feasible.

The goals of a readiness program are: (1) To get set so that if war breaks out we can mobilize fully in months rather than years. (2) To develop enough ready strength in the crucial European theater to guarantee us the necessary months in case of war.

Production priorities follow. There is plainly a strong preference for producing goods and services which will be useful *either* if war comes quickly or if we have a prolonged armed truce. This includes putting several million man-years into military training to build up ready strength, and providing a large stockpile of finished munitions, so that our ready forces (and those of our allies) would not be scanted

* This paper by Professor Hart, together with the following shorter papers by Professors Wallace, Daugherty, Chandler and Ackley and the ensuing discussion, represent the proceedings of a program on Economic Mobilization Short of War at the annual meeting of the American Economic Association at Chicago, December 29, 1950. The other of the two principal papers, "The Strategy of Direct Control in Economic Mobilization," by J. K. Galbraith, is omitted, as it has been published in the February, 1951 number of the *Review of Economics and Statistics*.

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in the early months if fighting started. At the bottom of the priority list will come goods whose ingredients have military value, but which as finished goods have only peacetime value. An example is the luxury aspect of auto production. A Cadillac is not much more transportation than a Chevrolet; but it embodies a good deal more materials and a lot more man-hours. A readiness economy cannot afford to treat consumers to the difference in comfort at the expense of the difference in resource-cost.

A readiness economy implies comfortable living for most of us. I do not mean that we owe it to the world to live softly and have plenty of fun. But a good deal of our consumption comes from sources (notably occupancy of existing houses) that cannot effectively be transformed into military power. A good deal, in the perspective of a long period of readiness, is what the classical economists called "productive consumption." Attempts at military diversion of essential foods, medical care, auto repairs, etc., would boomerang in the not-very-long run by reducing production. There is also a long list of consumables which *could* be converted, but at a loss rather than a gain. We could put unassembled parts of Cadillacs into scrap heaps; but it costs less to assemble them than it would presently to produce as much transportation by parts-fabrication plus assembly for an equal number of Chevrolets. We will need more cars before we are out of the woods. Complete production of Cadillacs is beyond our means; but it is also beyond our means to throw away those that are almost produced already.

The control problems of readiness differ in kind as well as in degree from those of full mobilization. Since the readiness economy may last a decade before we revert to a peace economy, we cannot afford to adjourn controversy and set aside such long-run objectives as the decentralization of political and economic power, efficiency, and preservation of economic opportunity. Although the diversions for military use are less intense in readiness than in full mobilization, many control problems are more acute. The lack of a vivid prospect of early victory reduces the incentive value of opportunities to save, of keeping the good will of civilian customers, etc.

The lack of wartime patriotic fervor implies more compulsion behind economic policy. Not that unwilling majorities can be coerced. But compulsion is necessary to keep small unwilling minorities from getting rewards for non-cooperation, and setting up pressures which will undermine the willingness of the majority. With a long time to go, we have to be more concerned over the corroding temptations for both controller and controlled which arise when the controller has discretion over matters of vital importance to a firm. But there is also danger

of crippling the economy by setting up "red tape" to limit such discretion. Readiness is emphatically not a policy of "halfway"—problem by problem, its strategy is more exacting than full mobilization.

The Inflation Problem

Building up to a plateau of readiness obviously creates an inflation problem. Inflationary pressure arising from the ***demand-suction*** process may be less intense than in full mobilization. But in exchange the ***cost-push*** process, with less patriotic restraints, is more intense. Besides, the cost-push process has been modernized by widening the area of sliding scales from farm prices to wages. At the same time, standards of enforceability for anti-inflation programs have to be stiffer.

Nobody needs to be persuaded that inflation is a bad thing. But not all of the popular objections make sense. The objection that inflation reduces mass living standards by eating away the buying power of the dollar smacks of wishful thinking. Keeping price tags constant does not enable dollars to buy goods unless we have the goods to hang the price tags on. Inflation or no inflation, there are going to be less consumable goods per dollar of income earned. Those who encourage people to believe that price control—without rationing—can conjure shortages out of existence are building up false hopes.

The objection that inflation devalues the military-procurement dollar is also questionable, at a time when appropriations have run far ahead of supplies available for military purchase. It would be at least as reasonable to stand this argument on its head and argue *for* inflation as a crude but practical means to get "economy in non-defense expenditure" by forcing each agency either to accept a cut in purchasing power or else persuade Congress (or a local government) to take positive action to increase its funds.

The valid objections to inflation are more sophisticated. Inflation impairs efficiency by bending the measuring rod of cost accounting and —more important—by making the hoarding of scarce materials a foolproof road to profit. Inflation impairs work incentives. In particular, since most workers save chiefly by acquiring liquid assets or repaying debts, it cuts into the incentive to earn in order to save. Inflation creates a demand for countermeasures, which are only too apt to take the form of half-baked and half-enforced direct controls, penalizing good citizenship and rewarding evasion.

Worst of all, inflation means squeezing the substance out of the promises by which we guide our economy. Despite all the talk about our dog-eat-dog economy, the fact is that our society rests largely on mutual confidence that bargains will be carried out. If payments regularly turn out to mean less than was understood when they were

promised, this confidence is shaken, and every sort of inter-group suspicion and conflict is stirred up.

Economists have an obligation to interpret the problem in terms of these real objections. Obviously, we cannot afford to antagonize real enemies of inflation by charging them with heresy, and insisting that they produce academically respectable reasons for their stand. But neither can we afford to let people pin medals on themselves as leading foes of inflation if their diagnosis and prescription are grossly inadequate—or if they are simply looking for a way to exploit inflation as sellers while resisting it as buyers.

The Mobilization Hump

If the American strategy of deterring aggression succeeds, the eventual plateau of readiness can be maintained without any unbearable strain. But between us and that plateau lies a hump of effort to make up arrears—for all the world the same thing as the investment hump of the Hicksian trade-cycle model.

One of the clearest humps in sight is in military recruiting. Once our program is well under way, inductions will consist mostly of young men just coming of age. But during the build-up to readiness, we will of course find all the military material we can in slightly older age groups as well. Inductions will have a fairly early hump—perhaps as early as summer 1951, when student deferments expire in large numbers. This implies also a slightly later hump (1952?) of men in training. Since the total number in uniform consists of trainees plus trained men whose service is prolonged to give ready military strength, the hump in total military numbers may come later. But as organized reserves build up, need for ready force to shield Europe will ease off; so unless other danger points call for more, we can expect the number in uniform to crest over, rather than merely level off, perhaps in 1953.

Procurement also presents a hump phenomenon—both item by item and in total. The various types of supplies needed in training will show requirement-schedules of rather the same shape as the curve of inductions—with diverse lags. Overshadowing this problem is the need to stockpile finished munitions. In case of actual war, we would have to be able to give the Atlantic Pact forces in Europe not merely an initial outfit but a rapid flow of supplies. There is no use in having men who are trained as armored divisions or fighter groups in the Air Force standing empty-handed after their initial equipment has been used up in the first weeks of a campaign; to put meaning into our training and organization of men, we must not merely catch up but pull ahead on the procurement side.

Humps are also in sight for various types of munitions-producing equipment, and for types of facilities—steel plant, electric generating

capacity, railway equipment—which would be overburdened in a later full mobilization. Besides, there is the problem of civilian protection and dispersal of concentrated targets. *Needs* for these (to reduce incentives to aggression) may have their peak month-before-last. Actual provision is apt to be largely postponed by the priority system till we are over the munitions-stockpile hump. The hump in military and related uses of metals and building materials, therefore, is apt to stretch out for several years (being squeezed against the ceiling, in Hicksian imagery). We can hope to get over the hump much sooner for textiles and perhaps even chemicals.

Counterpart of these humps, of course, is a consumption goods trough, beginning in 1951, and running for years. Once we are over the munitions hump, we cannot only release resources from military uses, but put our economic expansion to work for the consumer. Some key items may be on the upgrade again as soon as 1952. Other items, on the other hand, may go down into the trough very gradually, because of inventories and of the output from facilities we can afford to use but not to replace during the munitions hump, and may still not have reached bottom by 1953.

Unfortunately, many key policy decisions will be taken in a rather unreal climate this spring—just before the demand-suction side of inflation is ready to show its true power. The late winter of 1951 is tax-making season, and also the crucial period for many other lines of policy. But this is just the time when taxes hit their seasonal peak and which seems to have produced a perceptible seasonal deflation in several recent years. Besides, inventories and goods in process will hold volume high for spring clothes, consumer metal goods, and a host of products. If by any chance there is also a temporary reduction of world tension, there will be acute temptations for our political leaders to try to get off too cheap economically. In particular, they may be tempted to lay out a frankly inadequate fiscal and monetary program and plan to get through 1951 by jerry-built "temporary" direct controls—compounding the difficulties of 1952 and later years.

Equilibrium vs. Disequilibrium System

As Professor Galbraith has pointed out, we got through World War II unexpectedly well on the *disequilibrium system*. Our tax and monetary policy left a substantial "inflationary gap." But we repressed the inflation through price control and rationing. The resulting build-up of liquidity had much to do with the postwar inflation, but was not without advantages in avoiding the feared demobilization unemployment.

It does not follow that the disequilibrium system is a good one for handling the problems of the mobilization hump. Professor Galbraith has given us reasons to doubt that it would work as well in a World

War III as in World War II. Adapting his list of reasons to the still more difficult situation of a mobilization hump on the way into a readiness economy, it suggests that a disequilibrium system is a very bad gamble at present:

1. Savings incentives are weakened by 1945-48 experience, and by lack of vivid images of postwar bliss.
2. Liquidity at the outset is as great as in 1945.
3. Motives to hoard commodities, in the light of 1942-46 experience, are much stronger than in World War II.
4. Black-marketers would not be handicapped by inexperience, nor by restrictions on use of passenger autos.
5. Patriotic incentives to comply with controls are weakened; and publicity for non-compliance is fuller, making an epidemic more likely.
6. Sliding-scale wage arrangements promise to amplify the effects of policy errors.

Controllers as well as evaders have more experience to draw upon, of course. But initial moves suggest that much of this is running to waste, and that Congress and the White House are setting patterns which imply any direct-control system must reproduce most of the early fumbling of World War II—without the offsetting advantages of freshness and enthusiasm.

Hesitancy to come out for an equilibrium system seems to rest on two misunderstandings. One is that an equilibrium system means turning our backs on obviously useful direct controls. This is simply not correct. Any workable model of an equilibrium system implies many direct controls in the mobilization process itself—above all, price control on actual munitions, and considerable rationing. Besides, an equilibrium system implies direct controls to limit the cost push.

The second misunderstanding is that an equilibrium system sets unattainable goals for fiscal and monetary policy. This may be true for the most intense part of the hump. But the monetary-fiscal goals implied by the equilibrium system for 1951 and early 1952 are attainable. Beyond that, in view of uncertainties about government spending, about supply possibilities, and about consumer and business reactions, the only sensible policy is to try and see. Since a disequilibrium system has more chance of succeeding with all-out monetary-fiscal policy than with a pussy-footing policy, divergence of forecasts about situations over a year in the future should not divert economists from pressing monetary and fiscal programs.

Monetary-Fiscal Possibilities

By way of combatting defeatism on monetary-fiscal policy, we may profitably run over the field of possibilities.

To begin with, the standard of a balance between Treasury cash income and cash outgo *quarter by quarter* is probably a good approximation to a stabilization rule. (At least, it will be if we can keep bank loans tight enough to pass war-plant financing through the Treasury.) In applying the standard, we might well substitute accruals for receipts for the major item of corporation taxes.

Cash outgo will presumably pass the $60 billion level in the spring of 1951. The peak of the cash-outgo hump is hard to place either in time or amount; but if prices hold, we may take as rough figures $90 to $100 billion per year in the latter part of 1952. ($90 billion implies good success in trimming civilian expenditures.) The 1944 ratio (29%) of Treasury cash income to personal income would yield roughly $75 billion at presumptive 1951 income levels, so that taxes on a World War II scale would apparently carry us on a cash-balance basis into 1952.

Projection of tax possibilities from recent experience is, if anything, more encouraging. To begin with, the argument for stiff excises on scarce items (which economists but not politicians found convincing in 1940-42) is overwhelmingly convincing today. While revenue is merely the byproduct of such taxes, it is apt to be a very handsome byproduct; we may expect $3 billion from this source. When we reckon that this represents in good part price increases that buyers would very likely have to meet anyway, and that in the absence of such excises much of these increases might go into tax-evading black-market income, this program is very attractive.

If the standard for corporate taxes was to hold aggregate corporate income after taxes to the record levels of 1948, a standard with much appeal in relation to wage stabilization, something like $4 billion could be found here. If we set the Unemployment Insurance account to balance with mild unemployment (comparable to late 1949), well toward a billion would be added to contributions. Stiffening of estate and gift taxes could add something; though this is not very anti-inflationary money.

The main tax possibilities lie in revenue taxes on commodities and personal income taxes. A federal retail sales tax would presumably yield around $1 billion per point of tax. Rather than accept such a tax, most of us would choose lowering exemptions of the personal income tax, and raising first-bracket rates, as a lesser evil. A one-third cut in exemptions would yield about $4 billion of revenue at present tax rates. As to rate possibilities, we may think (as suggested recently by the Committee for Economic Development) in terms of capturing part of the balance of income left after exemptions and present taxes. With exemptions reduced to $400 per head, this balance in 1951 would be close to $100 billion. A 10 per cent slice (implying a first-bracket rate

of 28 per cent instead of 20 per cent) would yield roughly $10 billion. A 20 per cent slice (implying a first-bracket rate of 36 per cent—or roughly the rate the British applied during the war to the first 130 pounds of taxable income) would yield roughly $20 billion. Locating unreported income by taxing property income at the source and giving the Bureau of Internal Revenue more staff could add considerable revenue. An all-out personal income tax program could clearly yield at least $25 billion of added revenue. A more modest program to yield $15 billion would be quite simple to design. Such taxation would hurt —as much for economists as for anybody—but it would not hurt as badly as inflation.

Present revenue sources, at late-1951 levels of income, would yield around $55 billion of Treasury cash income. The rough tax calculations just sketched suggest that the maximum attainable revenue is not below $85 billion. The economic ceiling is probably set by enforcement limits; the incentive argument against high taxes, which tends to under-rate the "income-effect" incentive to effort of having to scramble to keep close to accustomed living standards may be discounted in this range of taxes. The problem is to get the political ceiling up to the economic ceiling.

On the monetary side, much can be done if we can keep the substance of monetary policy from being sacrificed to tap bank credit for the glory of Treasury security-flotation engineers. (An adequate tax policy, avoiding growth of debt, will reduce temptations for such an evisceration of monetary policy.)

The liquidity of the bonds held by the non-bank public needs to be reduced, even if we must pay more interest. Encouraging Savings Bond holders to extend their contracts rather than cash in at or before maturity is a helpful move. It would help still more if they were persuaded to give up *unconditional* rights to redeem before they extended maturity—allowing redemption to meet stated personal emergencies. Marketable bonds would sit more firmly if their sale would involve a sobering capital loss, while capital gains could be expected by holding them for awhile. This points to support prices appreciably below par. It might be wise also to pass the first call dates of some of the bonds callable in 1951, in order to reduce the prospect they will be paid off ahead of final maturity.

Bank reserves can be drawn tight enough to reduce the availability of credit—and to persuade banks to shorten loan maturities, increasing debtors' need for liquidity. This implies use of some combination of interest and security-reserve requirements (rather than of easy reserve positions) to find holders for issues which refund short-term Treasury debt as it matures.

Qualitative controls on installment and real estate credit will be at their most powerful when their effect is compounded with that of drastic shortages of new durable goods to buy. This effect should help us over the early months of the munitions-stockpile hump.

Margin of Safety in Economic Strategy

The hazards of economic forecasting are as great as ever, though their form has changed. We simply cannot forecast accurately how fast supplies will shrink or how fast incomes will rise; how much people will insist on saving; how compliance with direct controls will work out.

The kind of policy this points to may be illustrated by the personal income tax. Fortunately, tax reduction is easy. The upshot is to set a very high standard rate, and to make abatements from time to time if developments show we can afford to collect less. For tax legislation, this implies enacting two or three *alternative* withholding schedules, deciding from quarter to quarter which is to be in force, and tuning the annual rate at the end of the year to the withholding rates actually applied.

In the monetary field, the parallel strategy is to create a margin of safety by postponing bond refundings and by taking up the slack in bank reserves, including the potential reserves represented by bank holdings of government securities under present policies toward the security market. These moves will do no harm if inflation holds off, but will help to brake it if other policies prove inadequate.

In the direct control field, perhaps the key point is to be ahead of the game rather than behind in setting up rationing machinery. This greatly improves the prospects of "defending a price line" in case strains are greater than forecast. If stabilization policy as a whole has a margin of safety, so that runaway inflation is clearly forestalled, the farm and labor groups with sliding-scale arrangements can reasonably be expected to agree on deferred rather than instantaneous adjustments—which would widen the safety margin.

It is customary to say that if taxes and monetary controls are scamped, the resulting inflationary gap will force us to choose between the evils of inflation and those of across-the-board direct controls. This understates the problem. The political demand for direct controls is so strong, and the patterns of direct control now feasible are so full of holes, that a large gap will force us to accept *both* sets of evils. Whether we want to keep direct controls as effective as possible, or to minimize their use, we get the same answer: really drastic taxes, and a fresh approach to money and public debt management.

PRICE CONTROL AND RATIONING

By DONALD H. WALLACE
Princeton University

I shall consider very briefly some aspects of two questions: (1) Will price control work without rationing, and (2) is rationing a good substitute for price control?

Whenever unrestricted demand exceeds the available supply of a commodity at the ceiling price, some sort of rationing will occur—by queue, by lot, by seller's choice, by government order, or by some other means. I interpret our first question to be: Will price control work in the absence of rationing by government order? I think the answer is yes or no.

Price control on cigarettes worked very well in this country in World War II even when the shortage was pronounced. The opposite case, where price control will not work well without rationing, is aptly illustrated by meat and by clothing. In the industrial field, price control was quite effective, even before the adoption of allocation, the term used for rationing of industrial materials, in most primary metals, in chemicals, and in other commodities such as agricultural equipment. Scrap metals and lumber present instances of the opposite sort in the industrial field where price control cannot work well without rationing.

The examples just given point to important elements affecting the answer to our question, the nature of the market structure and the degree of control by sellers over the flow of the product and of its component materials. It is not easy to establish a new cigarette manufacturing company or to divert substantial quantities of established brands from the regular distribution channels through which the big cigarette producers want their products to go. On the other hand, live animals may travel different routes to the mouths of meat-hungry consumers. In World War II a host of country slaughterers sprang up and the flow of animals to the regular packers almost dried up at times. Black-market dealers channeled the meat into black-market restaurants and butcher shops and the meat supplies of the chains and of other legitimate retailers were constricted. In this case effective price control requires not only consumer rationing but also control of the flow all along the line.

Similarly, the big metal and chemical companies can control pretty well the flow of their products into immediate consumption, and the

component materials have few other places to go. In the fields of lumber and waste materials the opposite is true. The host of saw mills and waste-material dealers makes competition fierce, and in each case the number can be augmented.

A second significant factor in determining situations where price control will or will not work without government rationing is the size of individual sellers. Large companies that are in the public eye are less apt to violate price regulations than small fly-by-nighters.

The attitude of the buying public is also an important element. As long as buyers think they are being fairly treated in the distribution of the short supply, most of them will probably observe price ceilings and refrain from encouraging a black-market.

Consideration of these elements suggests that in many instances price control without rationing will work tolerably well even though the excess of demand is quite marked. It should be noted also that limitation orders and conservation orders can substantially reduce legal demand for materials. Such measures may often enable price control to work without actual allocation.

Finally, the most critical determinant of all is, of course, the degree of excess of demand. Beyond some degree of shortage, price control without rationing will break down, whatever the market structure and attendant elements.

Now I should like to turn to the question whether rationing is, as some seem to think, a good substitute for price control. Plainly rationing can, if it works well, restrict the physical volume demanded to the available supply. And rationing without price control would ordinarily bring a price somewhat lower than the price that would exist with unrestricted demand and no price control. The question is: Can rationing hold down prices of individual commodities as well as price ceilings?

Here again the answer depends on circumstances. It is conceivable that the price might be the same in the absence of rationing. This would be so if ration currency went only to people willing to pay this price—*i.e.*, if all the ration currency should go to people whose demands for quantities to which they were legally entitled were located at positions at or above this price on the curve of unrestricted demand. A pure instance of this case is unlikely. Hence, we can say that the price will ordinarily be somewhat lower than this as a result of rationing. There may, however, be an approach to this case in instances where ration certificates for very essential goods are issued only to persons with special need. The individual demand curves of such persons for commodities like tires and automobiles, where this system might be used, would probably be almost vertical within a substantial price range.

At the other extreme, we can conceive of a case where rationing would force the price below any ceiling price that would be set. If some recipients of ration currency would not pay as much as that ceiling price and if there were no restriction of supply below the quantity for which ration currency had been issued, this could be the result.

Reflection suggests that the most common case is probably a price somewhere between the free-market price with unrestricted demand and the ceiling price that would be established. Even where ration currency is distributed to everyone, this would probably be the result where the commodity is something that nearly everyone considers essential to his well being and the shortage is great enough so that consumption rates of most people must be markedly reduced. These are precisely the conditions which lead to introduction of ration programs. If the demand with rationing is such that in the absence of a ceiling the price would be at or below the potential ceiling level, this situation would probably reflect either a freakish distribution of ration currency or the absence of severe shortage.

A second point relating to the question of substituting rationing for price control is that the formulation and administration of a rationing program with the attendant ration currency and ration banking operations usually costs much more than the formulation and administration of a price ceiling.

A third point is that rationing programs often work well only if accompanied by ceiling price control. Compliance with allocation programs is likely to be impaired by existence of different prices for different parts of the supply of standard commodities such as steel, copper, and aluminum. Limitation of inventories, so essential to effective allocation controls, is difficult in the face of expectations of price increases. Public acceptance of rationing of consumer goods may be impaired by price differences or price levels considered unfair.

I suggest that those who advocate rationing as a substitute for price control overlook these three points: (1) In most cases of severe shortage rationing would probably be an ineffective substitute. (2) In cases of mild shortage it would be a very expensive substitute, with a consequent waste of manpower. (3) In many cases a ceiling price is required for effective operation of a rationing program.

The general conclusions suggested by these brief remarks are two: Apart from very severe shortages, there will be many instances in which price control will work tolerably well without rationing and many where it will not; and there are not likely to be many cases where rationing is an effective and desirable substitute for price control.

WAGE RATE CONTROL STANDARDS

By Carroll R. Daugherty
Northwestern University

Because of the events of the last few weeks, many persons have come to believe that this country must undertake, as quickly as possible, full mobilization for an imminent hot war. Many other persons still believe that the conflict with Russia will continue to be a cold one indefinitely if we increase our bargaining power by building up our military strength. And for this purpose, partial mobilization is said to be enough. But for either full or partial mobilization some sorts of direct price and wage-rate controls are said to be necessary. It is my contention that, ***given the fact of some such controls,*** they must be general and thoroughgoing rather than piecemeal. They should cover the wage rates of all workers and the prices of all raw materials, semi-finished products, and final products.

There are human or political as well as economic reasons for this conclusion. On the economic side the basic questions are, How can we successfully stabilize the cost of living, *i.e.,* prevent an inflationary rise in the prices of civilian consumption goods, without controlling the prices of the raw material and labor components of the consumption products? And how can we stabilize the prices of some products and their raw materials and labor components without stabilizing those of others? Not to do the first would distort the wage-price structure "horizontally." Not to do the second would produce "vertical" distortions.

On the human-relations or political side, the following considerations appear to be fundamental: If a sizeable portion of our resources is to be allocated to war products, there will be fewer civilian goods available. In real terms this means sacrifice for the country as a whole. And if every one is to cooperate in the mobilization, the sacrifice will have to appear to be equitably distributed. In money terms this means the following: (1) In the "horizontal" sense, labor would become exceedingly restive if the controls on wage rates were more rigorous than those on product prices and profits. And firms would feel it unjust for the controls on product prices to be tougher than those on wage rates. Similarly with raw material producers *vis-à-vis* final-product makers. (2) In the "vertical" sense, if the prices of some products and their

labor and raw-material components were controlled and those of others were not, all those subject to the controls would proclaim inequitable treatment. How, for example, can you successfully stabilize the prices of automotive passenger cars and the wage rates of workers helping to make these cars when you don't stabilize the prices of trucks and the wage rates of truck-producing workers? The latter workers belong to the same union, perform similar work, and are employed by the same companies.

In general, it may be said that, the less the sense of urgency and emergency among people, the more important are the human aspects of wage-price stabilization. It is mainly because of these aspects that it is imperative for the Congress to pass additional legislation giving the stabilization administrator more secure controls and enabling him to control the prices of house space and agricultural products.

Given general price and wage-rate controls, then, what standards and devices of wage-rate stabilization might successfully be adopted? To begin with, control policies should, as far as possible, be worked out in advance of their application. At the beginning of World War II, because of our lack of experience, it may have been necessary for the War Labor Board to play by ear—to develop policies out of a consideration of the particular circumstances existing in big labor-management dispute cases. Indeed, one may justifiably be surprised that the policies thus developed were applicable to such a wide variety of cases; the members of the Board showed unusual wisdom and insight. But it would seem that we have enough experience today to devise a relatively simple set of rules forehandedly.

Second, any wage-control program must be attuned to the realities of the American labor movement and of labor-management relations. Here, the present wage stabilizers will be more fortunate than the War Labor Board. There is less disunity and more maturity now in the labor movement. Labor is not now nearly so much in the midst of big organizational campaigns. There is a greater acceptance of unionism and collective bargaining by management; labor-management relations have made notable advances.

But there is one feature of existing union-employer agreements on wage-rate changes that will prove perplexing to stabilizers. This is the "automatic" or semi-automatic increases that are to be given periodically (1) in response to rises of stated amounts in the cost of living, and (2) in response to the increase in national average labor productivity. Even those contracts that do not provide automatic cost-of-living adjustments possess arrangements for frequent re-opening or renegotiation when the prices of consumption goods are going up.

The first kind of automatic change can be defended for peacetime

as providing the appearance of equity for the workingman. But in wartime, it is an important item of fuel in feeding the flames of inflation; it is on the cost-push side mentioned by Professor Hart. So what should the wage stabilizers do about such contract provisions—junk them for the duration of the emergency? It seems to me that doing this would strike a serious blow at collective bargaining and its fruits. Would it not be much better to produce a real stabilization of the cost of living? I think the answer is heavily in the affirmative—which leads me to emphasize that (a) the most important wage stabilizers will be the price stabilizers; and (b) the Congress should provide for adequate control of all prices, including rents and farm-product prices.

The automatic wage-rate rises based on national productivity increases appear to have full economic and political justification for peacetime; the country is able to afford them without increases in product prices. They would also be valid in wartime, when the government becomes a much more important buyer, provided that we could be sure there were labor-productivity increases during such a period. There may be no such increases during a period when skilled employees who are leaving the labor market for the armed forces are replaced by green or less skilled workers. On balance, however, I should be inclined, on the human or political side, to leave such labor-contract provisions in force.

Third, there is the matter of possible wage-rate adjustments within the general *structure* of wage rates. Any wage stabilizer inherits from peacetime a general level of wage rates and a relationship between this level and the general level of prices. It is these things that I have been discussing, for the most part, thus far. But a wage stabilizer inherits also a set of relationships among the wage rates paid for various occupations by various plants in various parts of the country. During peacetime these relationships are often in a state of flux. Within a given plant an employer, or an employer and union jointly, may be re-evaluating the rates paid for various jobs. And unions are frequently engaged in efforts to eliminate or narrow the inter-plant or inter-area differentials in rates paid for a given job or group of jobs.

The question thus arises, Granted that the general level of wage rates should not be allowed to rise, that it can be held down by appropriate controls over the cost of living, and that this part of the wage program will be acceptable to workers because of the limitations on firms' profits and farm-product prices, what shall be done about permitting adjustments within the structure of wage rates? The War Labor Board's program allowed such changes within its over-all policy of restraining an upward movement in the general wage-rate level. The Board allowed five kinds of increases: (1) To that third of the

country's workers who had not yet participated in the prewar round of wage-rate increases, it granted rises in accordance with the Little Steel formula. (2) and (3) It gave increases to employers and/or unions who could prove inter-plant or intra-plant inequities in job rates, provided that in so doing it did not create more inequities than it solved, that is, provided that there would be no upward whipsawing of the general level of wage rates. (4) The Board granted special increases to very low-paid workers on the theory that such employees would be particularly hard hit by possible rises in the cost of living. (5) The Board granted, with restrictions by rule in a general order, the making of merit or length-of-service increases to individual workers.

For the present emergency I am in accord with the notion of allowing increases to those laggards who have not as yet participated in the current or fifth postwar round of wage-rate increases. In other words, for reasons of equity, I should favor the application of another Little Steel Formula, leaving price control to nullify, in effect, the cost-of-living-increase provisions of existing fifth-round labor contracts. This same control over the cost of living would seem to make unnecessary for low-paid workers any special adjustments except those provided in the recently amended Fair Labor Standards Act. In respect to the other kinds of structural changes, my tentative opinion is that they are not needed now. This is because of the vast administrative difficulties experienced with the adjustment of alleged "inequities" during World War II and because of the success of unions in eliminating or minimizing such inequities before the present emergency.

A fourth standard of wage-rate control is a negative one: Wage rate differentials and changes, along with product price differentials and changes can not be allowed to be a major influence on resource allocation during a time of preparation for war. In other words, wage-rate increases should not be granted for "manpower" reasons. Just as in respect to materials and machines, some other system, authoritarian or voluntary, should be used to place labor where it is needed.

In this connection, however, there *is* the problem of setting up wage-rate structures for new war plants, especially if labor is not allocated to such plants in an authoritarian manner. For such cases the stabilization authorities might issue a general order requiring key job rates to be set no higher than the mode or the weighted average or rates for similar jobs in the labor market area as determined by the Bureau of Labor Statistics.

Finally, a word about administrative arrangements. Any law or government policy must not only make economic sense and be politically acceptable; it must also be administerable. Obviously, all wage-rate changes (except possibly for very small employers who might be

exempted by a general order of the wage stabilizer) must be approved by the stabilization authorities before they can be made effective. This means application to wage-stabilization offices. Such applications can be handled expeditiously only if the administration is decentralized in regional offices. Here the case load should not be overwhelming if the policies sketched above are adopted. The War Labor Board handled some 400,000 cases, of which about 70 per cent were of the inequity type, which we have thought unnecessary to handle.

One administrative mistake of the War Labor Board which I think it would be unwise to repeat is the creation of "commissions" that were supposed to stabilize wage rates in particular industries, such as trucking and shipbuilding. The wage decisions of these commissions were for the most part unstabilizing rather than stabilizing in the local labor market areas where these industries were situated; that is, they interfered considerably with the general wage-stabilization program, which was properly set up on a local labor market area basis.

There are other important wage-stabilization matters, such as the handling of incentive wage-rate systems, about which I do not have the time to speak. In general, however, I think it may be said that the program outlined above has the virtue of (a) tying wage-rate control very closely to the place where it belongs, namely product-price control and (b) presenting minimum interference with outstanding recent achievements in collective bargaining.

DIRECT CONTROLS OVER THE PRICES OF NON-COST-OF-LIVING ITEMS

By Lester V. Chandler
Princeton University

Owing to the ten-minute limitation, I shall have to make my points very briefly and without the many qualifications and elaborations that would be desirable in a longer discussion.

My remarks will be based on the following assumptions: First, that inflationary pressures will not be removed by adequately restrictive fiscal and monetary controls, so that there will in fact be a need for direct price controls. And, second, that the inflationary problem will not be of only short duration but may last for years. And I would emphasize the probable long duration of the inflationary problem.

The fact that someone has been asked to discuss the question of the extent and nature of price controls over non-cost-of-living items seems to imply that there exists some support for the view that price controls should cover only cost-of-living items, or at least that controls over the prices of non-cost-of-living items should be significantly looser. I cannot accept this view. It seems to me that if direct price controls are needed at all, they should cover the prices of other goods and services as well as cost-of-living items, and that there is no reason why the pricing standards applied in the two broad areas should differ significantly from each other.

This conclusion that non-cost-of-living items should be treated according to approximately the same standards as cost-of-living items will be supported by three complementary lines of reasoning.

In the first place, failure to place ceilings on the prices of things used for government and private capital purposes would permit large price increases in the areas and would generate inflationary pressures that would spread throughout the economy, including consumer goods. The expansion of the defense program will have a sharp inflationary impact on those industries producing and using all the metals, fuels, rubber, chemicals and other similar commodities. Many of these defense demands are directly competitive with capital goods, both for materials and for productive capacity. At the same time, the enlarged defense requirements and the high profitability of business will create a great private willingness to buy capital goods. Neither the government nor the private buyers of capital goods will be able to hold down the prices they must pay without the aid of price ceilings. Private buyers of capital goods would be glad to bid up prices if they thought they could get delivery that way. And the government would be forced to do the same. I would not favor price ceilings on tailor-made finished war goods, such as ships, planes, guns and tanks. The pricing of these types of finished war goods should probably be left to the procurement agencies. But a multitude of procurement offices buying thousands of types of finished goods and actively competing against each other are in no position to hold down the prices of labor, raw materials and other components of defense goods. In the last analysis, the pricing of finished war goods must in some sense be on a cost-plus basis, and the procurement offices need the assistance of price ceilings on components if they are to hold down the money cost of the rearmament program.

Large price increases on war and capital goods would increase total spendings for these things and generate correspondingly large increases in private money incomes and spending power. Price increases on war goods would increase total government spending, magnify the govern-

ment's financing problem, and probably enlarge the government's deficit and the amount of money that would have to be created by the banking system. They would also increase profits in these industries, enhance demands for wage increases, tend to divert production away from even essential consumer goods, and in many other ways undermine control over the prices of cost-of-living items.

This brings us to the second major point: it is not feasible to hold down the prices of cost-of-living items unless other prices are also controlled, and in line with approximately the same standards. This becomes increasingly true as the inflationary period is prolonged. It is clearly very difficult, if not impossible, to hold down the prices of finished consumer goods unless their cost components are also held down. But the longer the period, the more inclusive becomes the category of "Cost Components" of consumer goods. In the longer run, the cost components of consumer goods include not only the labor, materials and other services directly embodied in the consumer goods, but also the capital goods which are used up in producing the consumer goods. During a long period of price control, the prices of consumer goods would have to be maintained at some sort of parity with the prices of other things, not only to maintain equity in income distribution but also to maintain the production of an adequate volume of consumer goods. This is because the consumer goods industries must compete with the capital goods and war industries for materials, labor and other productive factors. During short periods the producers and dealers in consumer goods can be required to absorb some of the increase in their costs, but cost absorption cannot be relied upon to hold down consumer goods prices over a longer period.

Finally, to limit the prices of consumer goods much more tightly than the prices of other things would be inequitable in terms of income distribution. Those producing articles officially classified as cost-of-living items would have their money incomes held down, while those fortunate enough to be producing items officially classified as non-cost-of-living items would be allowed considerably higher money incomes. This would violate one of the fundamental purposes of price control, which is to work toward an equitable distribution of real income, both by influencing the distribution of money income and by regulating the purchasing power of each dollar of money income. Our sense of equity would be offended if over a long period of time those engaged in producing war and capital goods were permitted to make very much higher money incomes than those producing consumer goods. I strongly doubt that it would be feasible to devise a tax policy which would effectively remedy such discriminatory treatment. Such a discrimination in income

distribution would offend the public's sense of equity to such an extent as to undermine the effectiveness of controls over wages and cost-of-living items.

For all these reasons, and others that could be mentioned if time permitted, I believe that if direct price controls are employed, they should cover all important goods and services, whether or not they are included in the consumer price index, and that the pricing standards employed should be approximately the same. Price increases on war and capital goods generate inflationary increases in private money incomes; over a prolonged period it is not feasible to hold down the prices of consumer goods if other prices are allowed to rise markedly, and to hold money incomes in the so-called consumer goods industries much lower than those in other industries would be inequitable and would undermine the ethical basis of price control.

THE RELATION OF PRICE AND PRODUCTION CONTROLS

By Gardner Ackley
University of Michigan

Listening to the discussion today I have been struck, as in many similar discussions, with the relative neglect of treatment of direct controls over production and distribution of goods. The issue seems to be: indirect controls—*i.e.,* fiscal-monetary controls—versus direct controls—*i.e.,* price controls. Almost completely neglected is the vast array of orders establishing priorities, allocations, material use limitations and prohibitions, prohibitions of or injunctions to the production of certain goods; orders governing the use of machinery, establishing standards, controlling inventories, etc. While it is bad (apparently) to control prices because it will affect production and resource allocation, it is not bad to affect production and resource allocation even more directly. Either kind of controls "interferes" with market allocation, but that which interferes most baldly is scarcely noticed. Whatever the reason for the neglect, it needs to be remedied.

High-level mobilization generates pressure for two kinds of price changes: (1) a drastic change in relative prices, in favor of certain strategic goods, demands for which increase very greatly, or overseas supply of which is impaired; and (2) an upward pressure on prices of goods-in-general, resulting primarily from rising money incomes. In-

direct controls—fiscal and monetary—aim at the second of these types of price movement. If, it is argued, we control sufficiently total demand (and wages behave), we can stabilize the general level of prices. There will still occur a sharp rise in the prices of the strategic goods, but this is precisely what we want. It will discourage consumption of the scarce goods, and encourage the maximum transfer of resources to their production. But the usefulness of relative price changes—*of the magnitude to be expected under these circumstances*—can easily be exaggerated. That the market cannot accomplish this shift of resource use in a socially efficient manner can be seen from the fact that production and distribution controls for these scarce goods are established *before* price controls are invoked. This is not a case where price controls (at least government price controls) paralyze the market mechanism and require direct production controls as a second-rate substitute. Rather, as Gardiner Means well put it in his *Structure of the American Economy*, a primary prerequisite to effective allocation of resources by the market mechanism is *continuity of wants*. Minor or slow changes in demand the market may be able effectively to implement. Large and sudden changes it cannot handle. After all, successful functioning of the market requires, our textbooks tell us, some degree of knowledge of what, where, how much, for how long, to whom. A major shift in the commodity composition of demand leaves these questions unanswered —not so much for prime contractors, but surely for the thousands of firms vitally, but indirectly, affected by the shift in demand. Without priorities there is no guarantee that the government's demands will win out in the competitive bidding. Without allocations there is no reason to believe that "essential" needs will win out over "non-essentials"—that the bronze remaining after government needs are met will go to railroad bearings and generating equipment rather than to coffins and decorative store fronts. Without inventory controls, rising prices for these strategic goods may drive supplies out of sight. And so on. We refuse to accept the market as an effective guide to the allocation of these strategic goods, and hence the best argument *against* price controls on such goods is removed before the argument starts. The arguments *for* price controls have some weight, although I go along with Professor Galbraith's judgment that price control is less crucial on these goods than on others. Rising prices not only fail to provide satisfactory distribution of what is produced, but, beyond some point lose any efficiency in attracting added resources into production of these goods. Beyond this point, further price increases mean only "profiteering" for the resource owners lucky enough to be employed in these areas, creating social discord, and wage pressures likely to spread into other fields. Further, price controls tend to check hoard-

ing of these goods, and reduce the incentive to violate the production controls.

Thus, with respect to the strategic goods which will experience sharp price increases even if total demand is controlled, production controls will be used quite independently of the use of price controls. Both kinds of direct controls represent a dissatisfaction with the results of a "free" market, and the utility of price controls is in part as an aid to the production controls.

But in the situation in which total demand is not controlled, or if total demand is reasonably controlled but prices are pushed up by uncontrollable wage pressures, so that general price controls become necessary, then the rôles of price and production controls are reversed. The ineffectiveness of the market which leads to the direct control is the obvious inability of general price increases to check the excessive demand which caused them. As we now all understand, the price-income-price spiral has little self-equilibrating character. Beyond some point it is even self-disequilibrating. Such slight equilibrating character as it has arises in part from income shifts of a socially unacceptable sort. It is not that in an open inflation the wrong civilian goods get produced (although the wrong people may get them). Production controls are not the answer. It is the price movement itself which is objectionable. Hence general price controls are imposed.

If all else remained unchanged, the allocative effects of such controls might not be serious. As Professor Galbraith puts it: "Resources will continue to flow in the previous channels; on the assumption that the pre-control allocation was satisfactory, it will remain so for an indefinite period." But all else does not remain unchanged, and in some fields, as Deputy Administrator Galbraith well knows, continued price controls of the only sort that are administratively feasible lead increasingly to allocative results of a most vicious sort. Here, then, is a new and different use for production controls—to counter the unsatisfactor allocative effects of general price controls when changes in volume, or in unit cost, or in risk elements make a changed allocation more profitable; and where ties of buyers to sellers do not dictate continuing allocation in the less profitable channels. I shall not review in detail the unfortunate experiences in World War II with food, with textiles and apparel and other consumer goods, with made-to-order goods like castings. Some excellent volumes in the OPA series of Historical Reports of War Administration review this experience in detail. A reading of the record cannot fail to convince anyone that the problems were serious, and were never really solved. The blame was in part OPA's. In part, however, it traces to a lingering belief by the authorities in charge of the production controls that their job was war

production. Their responsibility to the civilian economy was limited to assuring the maintenance of such essentials as transportation, utilities, and housing for war workers—whose war-supporting rôle was obvious. It was not their concern to make stabilization work through using their powers to see, for example, that low-priced dresses continued to be made instead of high-priced ones. Efforts were made in this direction, to be sure; but they were too little and too late, and were too often obtained only after pressure had been brought on the production authorities from above. Given a firm conviction, from the beginning, that the production authorities have this responsibility for the content of purely civilian production, the technical problems of production control are far from insoluble. To be sure, the market is a far more sensitive and less costly allocative device than the crude direct controls that are possible, but if the alternative is open inflation, the cost is worth paying.

DISCUSSION

RICHARD B. HEFLEBOWER. Professor Galbraith has proposed quite different policies for the industrial materials and their products on the one hand and for consumer goods, including foods, on the other hand. For the former, he would move energetically into direct price controls plus limitation orders, so as to prevent the sharp increase of demand resulting from the defense program, from being reflected in prices. In contrast, for consumer goods he would rely primarily on the restraining effects of fiscal policy.

This diagnosis of the problem should comfort those responsible for inflation control. Direct controls are more feasible for durable goods and industrial materials than for food and clothing and the materials from which they are made. For the latter reduction of demand by fiscal policy is, without argument, the best device.

But will the restraining influence of fiscal policy be sufficient to prevent sharp advances in the cost of living? Probably not. Under the wage policy of reflecting the cost of living in basic wage rate adjustments, wages as costs and as income will advance significantly. As costs they will upset stabilization of prices of non-consumer goods. As income they will outrun further tax advances and pull up the demand-determined prices of important consumer goods.

Much of Professor Galbraith's apparent optimism about consumer goods' prices stems from assuming that the income elasticity of demand for these goods is low. But he, or someone else on the program, has argued that it will be more difficult to get people to save than during the last war. Add to this the expectations of lower supplies of consumer durables, and the evidence points to high consumer spending. Finally,

if we project a rise of consumer incomes after taxes, or even a failure of those incomes to fall, the accumulated evidence points to the following question, "Where else can such a level of income, and an enlarged income after taxes, I suspect, be spent than for non-durable goods, including food?" This all forecasts a sharp increase of expenditures for these commodities of inelastic supply, and of heavy weight in the cost of living. If so, this will have much more to do with wages, and with costs in the war industries, than will the profits of the manufacturers of these latter goods.

So the price movements of the non-postponable items in the consumers budget becomes the central problem of inflation control. If one deems fiscal means to be inadequate, then direct control of these commodities rises to first rank in public policy, not to the subordinate rôle Galbraith would assign to it, if I understand him correctly. But policy-makers face at once the great difficulty of planning controls and of obtaining compliance in those commodity fields. This is the basic enigma confronting those formulating control policy now.

David L. Wickens. The trend of the panel's discussion has tended to favor price controls for all commodities plus considerable, if not complete allocation or rationing of goods. Granting the logic of much of the discussion, these conclusions might require qualification under certain conditions which may confront the country.

First, if the emergency should require only limited mobilization so as to engage only a limited part of the country's economic activity, complete and rigid controls might impose hampering restrictions more damaging to the economy as a whole than would be warranted by the gains for special purposes of the emergency.

Second, if the emergency should prove to be of long duration, could the economy retain its effectiveness if rigid controls replaced its normal dynamics?

In view of the nature of the Asiatic situation and the inertia of the peoples against whom we are preparing, it is possible that preparation or even limited war might go on for a long period of years. It could readily exceed the duration of the first or second world war and conceivably could last ten or twenty years. Certainly an emergency which continued for most of a generation might be expected to merge its requirements with established economic activities and could best be dealt with by the normal methods of a free price system and a minimum of allocation of materials. Maximum efficiency would require freedom of operation of the economy with self-aligning adjustments in response to changing needs. Restrictions would prevent full production. Should

not consideration be given to holding controls to a minimum, the length of time for which such controls are proposed, and the conditions under which controls would be released?

ROBERT R. MOSS. I am struck by the fact that none of the excellent papers just presented included any reference to the implications of various proposed methods of managing the defense economy with respect to achieving a successful transition in the post-emergency period. This is particularly surprising since the postwar struggles with the inflationary heritage of the "disequilibrium system" of World War II should still be fresh in our minds.

The current enormous public debt had almost certainly not worked off its inflationary potential prior to the Korean outbreak. Now we are faced with the necessity of a further, and probably considerable, expansion of this debt. This may well produce greater demand pressures against controlled prices than in World War II since the resulting accumulation of liquid assets in the hands of the public will occur at a time when the public's liquidity preference has already been considerably worn down by the post-World War II inflation. Consequently, it would seem advisable to "blow off" or at least leak some of the accumulating steam as it is generated by allowing a moderate degree of income and price inflation. This may not only forestall black markets, and prevent the break-down of the control machinery, but it might also be desirable in the interest of keeping the problems of subsequent transition back to a civilian economy from getting out of hand.

If the accumulation of inflationary pressure is rigidly suppressed by all-embracing direct controls, an explosive situation will be created which will necessitate the perpetuation of these controls for an indefinite period following the emergency. Furthermore, the resulting expansion of the national debt relative to national income would lead to even greater pressure on the monetary authorities to maintain a low interest rate structure with concommitant monetary ease in order to keep the debt burden within bounds and to "preserve the integrity of the debt" (*i.e.*, to prevent government bonds from breaking through par on the downside). This would, of course, aggravate the inflationary pressure and increase the necessity for maintaining direct controls. In other words, except in the unlikely eventuality that we succeed in enacting a truly effective pay-as-you-go tax program, we will have to face considerable inflation sooner or later, and it seems to me that it would be more prudent to undergo some of the inflation now than all of it later.

In a situation short of total war political pressure behind wage de-

mands would probably force the economic control agencies to bend the wage—and consequently the price—line sufficiently to bring about the minimum leakage of accumulating inflationary pressure desirable to avoid the problem of dealing with the full inflation potential in the post-emergency transition period. Instead of becoming unduly alarmed at such a likely development, the control authorities, and economists in general, might devote their efforts to devising methods of equalizing the burden of the resulting "creeping inflation," including perhaps tax concessions for those dependent on fixed incomes.

IS PRICE CONTROL REALLY NECESSARY?

By Wytze Gorter and George H. Hildebrand*

As this is being written, the Administration—apparently acting on the principle that the only way to roast a pig is to burn down the house—has decided to impose all-out direct controls, "to fight inflation" and to shift a portion of national output from civilian to military goods. Yet there is a sizable group, including many economists, that urges using the free price system to do the latter job. Between these extremes are the "political realists" who advocate a bit of both approaches. Though all these groups agree that we must rearm speedily against the threat of war, some propose to destroy the free price system as the best means to this end. This is sheer folly.

The duty of professional economists is clear: to demonstrate once again the superiority of the price system over direct controls, even in the management of a preparedness economy. Of course, this entails acceptance of the feasibility of sound monetary and fiscal policies. In the following pages, we shall contend that a simple program of "cash and carry" preparedness is not only more efficient than a complex system of direct controls but may be more acceptable politically as well. We shall develop the argument without elaboration because the issues really turn on first principles and not on questions of detail.

As Professor Hart and others have shown, there are basically three stages in the transformation of a peacetime full-employment economy to a total war economy. First, there is the painful, often agonizingly slow shift from the production of certain consumers' goods to war equipment. This period may last from eighteen to twenty-four months. In the second stage, the country is prepared—in men, equipment and productive capacity—for full mobilization for total war on short notice. This stage of preparedness may well last indefinitely, perhaps for a generation or more. The third stage is total war.

At the present time, stages one and two are the relevant ones for policy. In contrast, total war is still problematical. Put bluntly, the present transition to preparedness is simply the classical problem of a full-employment economy required to shift the composition of its out-

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put in response to a drastic shift in demand. But the current shift in demand is not a voluntary one initiated by free consumers in the market. It is a shift *away* from consumer demand to government demand. This makes the process by which this shift is accomplished of crucial importance.

Essentially, there are three ways to achieve the desired redirection of demand: (1) monetary expansion with free prices; (2) monetary expansion with controlled prices; and (3) no monetary expansion with free prices. The first route leads to open inflation and disaster. The second leads immediately to rigidity and inefficiency, and suppressed inflation and may also end in open inflation. The third route looks most difficult, yet is the safest to travel, and alone can lead to an economy untouched by the ravages of inflation.

We advocate the third route to preparedness. This means a cash and carry fiscal-monetary policy. Cash and carry means that no federal expenditures are to be financed by borrowed funds. Only thus can we match the increase in federal demand with a decrease in civilian demand, which is the heart of a noninflationary approach to preparedness.

Of course, drastic and heroic measures are then necessary. On the fiscal side, tax rates—personal income, corporate and excise—will have to be raised to whatever amount brings the desired balance with federal outlay. Nonessential outlays at all levels of government must be cut to the bone. On the monetary side, excess reserves must be greatly reduced and the Treasury policy for supporting the bond market must be radically altered. The growth of installment credit must be checked.

Adoption of a cash and carry program eliminates the need for price controls. The redirection of demand can then be carried through without severe inflationary pressure. The heavy increase in taxes will invoke a general contraction of civilian demand. With prices free to move up or down, the reactions of entrepreneurs and workers will lead them to do precisely what the preparedness program requires. For example, the sharp fall in demand for consumer durable goods, coupled with a parallel growth for the military output of these industries, will furnish them with adequate incentive to convert to military production. This conversion will automatically include workers already in these industries, and through derived demand will also promptly direct raw materials to more urgent uses. Should preparedness requirements mount, further increases in taxes will bring additional reductions in consumer demands and will hit the sale of other goods. Producers of these other consumers' goods, in turn, will then be anxious to convert. If they cannot convert, part of the labor and raw materials used here will

shift to more profitable areas. In this manner, free prices perform the resource allocating function.

Free prices also provide the simplest possible basis for the distribution of goods. Under cash and carry this unique advantage will be retained. This is economical. Manpower is conserved and all the problems of administrative rationing are avoided. Furthermore, though consumers are given a narrower range of goods, they remain free to decide their own combinations of these items. Prices will adjust themselves automatically in reflection of consumer preferences.

One further advantage of a free price economy should be mentioned. With completion of the transition to preparedness, we shall then enter a period of indefinite length, when the secular growth of output may once again permit a slow rise of living standards. During this period, flexible prices can guide the allocation of resources and the distribution of civilian output. Contrast the simplicity of this method with the cumbersome, arbitrary and wasteful procedures required under a system of price control and rationing.

An extreme proposal such as we have made can always be condemned as impractical. But is this the case here? We think not. However, three problems—two economic and one political—must candidly be faced.

The first economic problem is wage inflation. Can collective bargaining in the armaments industries, for example, set off a general wage-price spiral? Not under strict cash and carry. During the transition to preparedness, some wage increases in these industries are desirable because they encourage the necessary transfer of workers. If these wage increases force up the prices of armaments, taxes will have to be increased to cover the added cost. This further reduction in disposable income will intensify the fall in demand for civilian goods, furnishing added incentive for workers to shift to the armaments industries. Certainly, union leaders in the civilian goods sector of the economy confronted with falling labor demand will hardly be encouraged to adopt an inflationary wage policy however tempting the prospect might be.

Let us assume next that the desired rate of preparedness output is attained and that the unions in the armaments industries now seek further wage gains. If these increases are granted, and the armaments producers raise prices, tax rates must rise to meet the higher procurement costs. Deflation will follow for the civilian goods economy but this time will not be offset by a rise of employment in the armaments industries. Since unions in the latter industries will be on notice that each price rise will be met by a commensurate tax hike, and since in the civilian sector unions, unorganized workers and entrepreneurs alike will know that each tax boost will lower employment and living

standards, the full force of public opinion can be brought to bear upon the armaments unions to hold them in check. If nevertheless they defy public opinion and obtain their wage increases, the resulting unemployment will contribute economic pressure to support public opinion as a deterrent to the next inflationary wage attempt. Admittedly, deflationary unemployment is unattractive in itself, but it will serve as convincing proof of unsound wage policies. And this unemployment may well be a small price to pay to avoid the potentially disastrous alternative of compulsory arbitration. Even union leaders may be brought to recognize this.

The second economic problem concerns cash balances and other liquid assets. Does their existence undermine the case for cash and carry? No. Though some holders of these balances may spend them at the outset, in an attempt to maintain consumption standards, under cash and carry this tendency will be much smaller than under either open or suppressed inflation. Cash and carry creates expectations of long-term stability in prices, hence alone provides the incentive to hold cash. Open inflation is a direct invitation to spend these balances. Under inflation suppressed by price control, there may be a period during which these balances are built up, primarily because prices are stable. But as the balances continue to grow, black markets develop, confidence in the value of money wanes, and the system of price control breaks down. If—as is entirely possible—stage two were to last many years, price control clearly will not provide an economic climate conducive to the retention of cash balances.

The third problem is the really crucial one: is cash and carry politically possible? We believe that it is. Though politicians generally claim proficiency in the art of gauging the public's propensity to accept economic and political proposals, their record in recent elections hardly offers unequivocal proof of their infallibility. So, while speculation concerning the politically possible ordinarily is a field into which the economist had better not venture, the urgencies of the hour would seem to justify an exception. In what follows, therefore, we present some reasons for the hypothesis that cash and carry *is* politically possible, and hence entitled to serious consideration.

In times of emergency it is generally true that a bold and simple plan has far greater appeal than a policy of compromise and drift. Certainly the idea that government income must equal its outlay and the reasons for this policy are simple enough to be understood by everybody. Instead of the illusions fostered by price control and deficit spending, the very size of the required tax increases would drive home to everyone the magnitude of the sacrifices actually demanded by preparedness. When presented to the public as an alterna-

tive to the interminable queues, stamps, boards and bureaucrats, cash and carry would command powerful support of a way of escape from these nuisances, even at the cost of a heavy tax burden. With no group exempt from real and obvious sacrifices, national unity could become a fact instead of a political catchword.

If stage three—total war—occurs, price control and rationing may be required. The exigencies of a siege economy often demand equal distribution of essentials. It is a matter of survival. Under these conditions there will be dramatic and compelling reasons for the wholehearted acceptance of otherwise intolerable infringements on liberty. In a long-lasting preparedness economy, however, these attitudes are unlikely to be present. Controls will not then be accepted with only minimum protest. Violations will be widespread, and enforcement difficult and costly. Obviously, then, there is great danger in a premature imposition of direct controls. If we are forced into a siege economy of total war, mere continuance of existing direct controls will not provide the psychological support requisite to their success. So a program of direct controls may then fail at the very time when it is most needed because it had been imposed too soon and for too long.

This brings us to a final remark. Even though price control has been imposed in stage one, it should be promptly supplanted by a cash and carry policy.

AN ECONOMISTS' STATEMENT ON ANTI-INFLATIONARY MEASURES*

The undersigned economists believe that prevention of inflation in the situation created by the expanding defense program requires, as the principal line of defense, a substantial increase in taxation, reductions in expenditures at all governmental levels wherever this can be done without impairing national defense or other essential public services, and a more restrictive credit policy. The basic cause of inflation, an excess of money demand relative to available goods, must be attacked. Only adequate fiscal and monetary measures can remove this basic cause.

With the economy already operating at very high levels, further increases in spending can not fail to enhance inflationary pressures. Under the influence of the expected increase in defense spending following the Korean outbreak, business and consumer spending has already risen markedly, and price and wage increases are augmenting business and consumer incomes. Yet most of the planned rise of defense spending is still to come, and this further rise will generate additional increases in private money incomes. Large expenditures on military programs and foreign aid, with their inflationary impact, may be needed for a decade or more. Faced with this long-run inflationary prospect, we recommend that the increase in total spending be continuously curbed in three principal ways, and that these constitute the first line of defense against inflation:

1. Scrutinize carefully all government expenditures and postpone or eliminate those that are not urgent and essential. Substantial reductions can be achieved only if some programs are cut.

2. Raise tax revenues even faster than defense spending grows so as to achieve and maintain a cash surplus. Merely to balance the budget is not enough. If the inflationary pressure is to be removed, taxes must take out of private money incomes not only as much as government spending contributes to them but also a part of the increase of private incomes resulting from increased private spending of idle balances and newly borrowed money. Larger taxes must be paid by all of us. Reliance should be placed primarily on increases of personal income taxes on all income in excess of present exemptions. Higher corporate

* This public statement was signed by approximately four hundred economists and is included in a staff report of the Joint Committee on the Economic Report entitled *General Credit Control, Debt Management and Economic Mobilization.*

profits taxes, in one form or another, are also imperative. In addition, loop-holes in our tax laws should be closed.

3. Restrict the amount of credit available to businesses and individuals for purposes not essential to the defense program. An expanding supply of low-cost credit which swells private spending cannot fail to stimulate inflation when the supply of goods available for private use will be difficult to expand and may even decline.

Selective controls over consumer credit, real estate credit, and loans on securities are useful for this purpose and should be employed. But we believe that general restriction of the total supply of credit is also necessary. This can be accomplished only by measures that will involve some rise of interest rates.

If general inflationary pressure is not removed by fiscal and credit measures, we face two alternatives: (1) continued price inflation, or (2) a harness of direct controls over the entire economy which, even if successful in holding down prices and wages for a while, would build up a huge inflationary potential in the form of idle cash balances, government bonds, and other additions to liquidity. Such accumulated savings would undermine the effectiveness of direct controls and produce open inflation when the direct controls are lifted. Everyone remembers vividly the sharp inflation of 1946-1948 when the wartime accumulation of liquid assets went to work on prices after the removal of direct price and wage controls. Either of these alternatives is extremely dangerous. A prolonged decline in the purchasing power of the dollar would undermine the very foundations of our society, and an ever-spreading system of direct controls could jeopardize our system of free enterprise and free collective bargaining. For these reasons we urge that fiscal and credit policies constitute our primary defense against inflation.

The best possible fiscal and credit policies, however, will not eliminate altogether the need for other types of restraints. The first impacts of a defense program are felt especially in particular commodities. Effective allocation programs and orders limiting the consumption of short materials to essential uses, and an expansion of supplies can help stabilization of prices and wages in such specific lines; but they cannot of themselves ensure price and wage stability. Moreover, it is obvious that stability of the general level of prices in the economy would be impossible in the face of general wage increases that substantially raise costs and private spendable incomes. For the above reasons, voluntary restraints by business and labor are an important ingredient of a successful anti-inflation program, and if business and labor cannot or will not exercise such restraint some mandatory government ceilings may be necessary.

In sum, fiscal and credit measures are the only adequate primary defense against inflation, and can minimize the extent of direct government controls over wages, prices, production and distribution. If adequate fiscal and credit measures are not employed, the country will face the ominous choice between continuous inflation and a prolonged application of widespread government price and wage controls.

November 30, 1950

CREDIT CONTROL IN FRANCE

By M. A. KRIZ*

By the middle of 1950, in the comparatively hopeful days before the Korean crisis, France had attained reasonable internal stability and had approached an acceptable international balance. In the rehabilitation and stabilization of the French franc, credit controls have been an essential instrument, but France's experience with them has remained almost unnoticed on this side of the Atlantic. Yet France's monetary and credit policies are of great interest not only as regards the question of their effectiveness but also from the broader viewpoint of the general controversy as to the appropriateness in "pre-Korean" Western Europe of monetary controls, as against direct controls of prices, consumption, and production.

The postwar credit controls will first be briefly analysed. The recent course of France's money supply will then be outlined with a view to tracing its origin—whether from the acquisition of foreign exchange or from bank credit expansion to government and business. Against this background, the mechanism of bank credit expansion will be reviewed, with special emphasis upon the particular channels through which credit has been expanded within the framework of the controls. In the last section, an attempt will be made to appraise France's monetary and credit policies in the light of its recent economic recovery, restoration of international balance, and currency stabilization.

I. *Postwar Credit Controls*

In the early postwar years, largely as a result of the prevailing scarcities and disruption of the financial and administrative machinery, France experienced a severe inflation. The postwar rise in prices was, in its initial stages, the product of the inflation potential accumulated during the war as a result of German exactions. However, as time passed, it more and more reflected the continuing excess, over avail-

* The author is on the staff of the Federal Reserve Bank of New York. The views expressed in this article are not necessarily those of the bank. The author, who had the opportunity to visit France in 1949 and again in 1950, is grateful to many French friends for guidance in understanding the rationale, the mechanism, and the operation of credit control in France. He is also greatly indebted to Mr. John Reed for valuable help in preparing the statistics used in this paper.

able resources, of spending for investment and consumption despite the gradual improvement in the supply position as a result of rising production and a substantial import surplus. Government deficit financing was a major source of inflation, but continuing bank credit expansion to business was also important. A cheap money policy, under which the Bank of France discount rate was kept at an all-time low from 1945 to early 1947, and a complete absence of credit controls characterized these years.

In early 1947, the French authorities endeavored to check the continuing bank credit expansion by raising the Bank of France discount rate from 1⅝ per cent to 1¾ per cent[1] and by establishing direct credit controls for the first time in French monetary history. In these steps the emphasis was, however, on controlling the distribution of credit rather than its volume, the credit policy being conceived as "discriminatory but not systematically restrictive."[2] It was for this reason that reliance was at first placed exclusively upon the qualitative control of credit. In January 1947, in conjunction with the rise of the discount rate from 1⅝ per cent to 1¾ per cent, the National Credit Council[3] instructed the commercial banks to exercise caution in granting loans and advances, and especially to refuse credits that might be used to finance commodity hoarding.[4] Any advances to individual firms in excess of 30 million francs (raised to 50 million in February 1948) or advances by any bank that would bring total advances by all banks to any business enterprise over this amount, were made subject to prior authorization by the Bank of France. These restrictions, however, applied only to loans and advances; the discounting of commercial paper was excluded on the ground that the channels between industry and trade should not be obstructed by limitations on self-liquidating commercial paper, considered as more or less neutral in its monetary effect.

In October 1947, along with an increase in the discount rate from 1¾ per cent to 2½ per cent, the existing restrictions were tightened, while the National Credit Council in addition instructed the banks

[1] For the structure of Bank of France discount rates and the changes from 1945 to 1950, see the table in footnote 16.

[2] *Deuxième Rapport Annuel du Conseil National du Crédit*, extracts of which were published in translation in the *Federal Reserve Bulletin*, August 1948, pp. 950-60.

[3] The National Credit Council, established by the law of December 2, 1945, is entrusted with the formulation of monetary policy for all agencies of the French government and the entire banking system. For the organization of the Council, see the translation of the law of December 2, 1945 in the *Federal Reserve Bulletin*, May 1946, pp. 483-88.

[4] For a more detailed analysis of France's credit controls, see article by Albert O. Hirschman and Robert V. Rosa on "Postwar Credit Controls in France," *Federal Reserve Bulletin*, April 1949, pp. 348-60.

to grant new credits only where funds were required for essential business and could not be obtained by increased sales efforts, by liquidating superfluous assets, or by recourse to the owner's personal resources or to the capital market. In addition to restricting new loans and advances, the banks were required to scrutinize existing credits with a view to cutting down or cancelling the facilities of customers not directly engaged in the production of goods. Credit for nonproductive purposes such as the purchase of securities or property was prohibited. Finally, the banks were required to supply the Bank of France with monthly detailed statements of all loans and advances. These restrictions were enforceable, where necessary, by refusal of the Bank of France to grant rediscount facilities.

The difficulty with these qualitative controls was threefold. First, the exclusion of commercial bills from any control provided a loophole through which manufacturers and traders obtained access to banking credit that was denied them by the restrictions on loans and advances. Secondly, the commercial banks, and even the Bank of France, found it difficult to apply general criteria as to economic usefulness and essentiality, to concrete requests of credit. It simply was not practicable to relate each single credit application, which by itself might appear entirely justified in view of the solvency and the credit standing of the borrower, to the volume of credit outstanding at any time or to the national investment program. Finally, it soon appeared that without some quantitative limit to total credit expansion, qualitative controls by themselves would prove inadequate.

In a banking system that previously had been free from legal reserve requirements, the establishment of quantitative control was a development of great import. Despite the mounting inflation, the quantitative credit restrictions were imposed very gradually at first. In February 1948 the commercial banks were instructed to maintain a minimum liquidity of 60 per cent of their liabilities; this rule, however, seems to have been motivated largely by considerations of sound banking practice, and in no way implied that the banks should hold any specified proportion of Treasury bills, since rediscountable commercial bills also were eligible. Actually, the measure increased somewhat the control of the Bank of France and the National Credit Council by limiting the amount of credit given by banks through over-draft advances and medium and long-term loans.

Far more comprehensive control was, however, established in October 1948 when the French commercial banks were directed to maintain in their portfolios a specified minimum of Treasury bills and other public securities, such as acceptances of the Crédit National, a semigovernment institution financing French economic reconstruc-

tion. The purpose of the new restrictions was to prevent the commercial banks from expanding private credit by selling government securities to the Bank of France, directly or indirectly. As a matter of fact, the commercial banks had unloaded sizeable amounts of government securities in 1946 and 1947 despite gentlemen's agreements between the Bank of France and the commercial banks under which the latter were to maintain existing holdings of Treasury paper except when there was a net withdrawal of deposits.

The new regulations formalized these agreements. Since October 1, 1948, the commercial banks have been required to keep their holdings of government securities at not less than 95 per cent of the total volume held at the end of September 1948. Only in case of a decrease of their liabilities below the level on that date may their holdings be diminished, and even then only by an amount that does not exceed 80 per cent of the decrease in liabilities.

Furthermore, 20 per cent of any new deposits (in excess of the deposits on September 30, 1948) have to be invested in government securities; the remaining 80 per cent are of course available at the banks' discretion for additional purchases of government securities or for the expansion of private credit. The 20 per cent requirement, however, involved no radical change from the previous practice since the actual "reserve ratio" of government securities against deposits amounted to 28 per cent at the time when the new regulations went into force. At the end of 1949, this ratio amounted to 24 per cent.

Finally, the measures relating to bank holdings of government securities were supplemented by an additional quantitative restriction—the establishment of rediscount ceilings. Previously, commercial banks had been able to rediscount commercial bills without limit. Informal rediscount ceilings were reportedly established at the beginning of 1948; but like the minimum-liquidity requirement, they were inspired by considerations of sound banking practice, aimed primarily at protecting depositors in small banks against undue expansion of these banks, rather than by a desire to devise a new instrument of credit policy.

Rediscount ceilings were established individually for each commercial bank, with each bank's ceiling being treated as strictly confidential. An over-all maximum was fixed for the banking system as a whole. The purpose of these ceilings was, of course, to prevent unlimited use of "self-liquidating" commercial bills as a medium of credit expansion, since once a bank has reached its rediscount ceiling, even prime commercial paper becomes ineligible for rediscount at the Bank of France.

In order to mitigate the shock effects of the imposition of strict quantitative credit limitations, the over-all rediscount ceilings were set

at 188 billion francs, or some 19 per cent above the level of rediscount actually outstanding at the end of September 1948. The volume of rediscounts gradually expanded up to the ceiling, and the ceiling itself was increased to 219 billion francs at the beginning of 1950, as is shown later.

Three types of bills—certain medium-term obligations of the Crédit National,[5] certain agricultural bills,[6] and certain Treasury paper[7]—were, however, exempted from the ceiling, being thus given unrestricted and unconditional access to the rediscount facilities of the Bank of France. These exceptions have been extended since July 1949 to include export bills. As I shall point out later, it is the rediscounts not subject to ceiling that have accounted for the continued rise in Bank of France credit to business since the establishment of quantitative controls in September 1948. Bank of France open-market operations also were free from restrictions, and, as will be explained later, the purchases of Treasury and commercial bills became a second vehicle of credit expansion in recent years.

The restraining effect of rediscount ceilings and required Treasury minimum bill holdings was therefore by no means absolute. Indeed, it is because the credit continued to expand—not indiscriminately, but along predetermined lines—that the French experience with credit controls calls for study.

II. *The Recent Course of the Money Supply*

Between September 1948, when quantitative credit controls were established and existing qualitative controls strengthened, and September 1950, France's money supply rose by 978 billion francs, or 50 per cent. The recent course of the money supply and its principal components are shown in Table I.

Up to 1948 the rise in the money supply coincided with a continued rise in wholesale prices, which advanced 71 per cent in 1945, 80 per cent in 1946, 45 per cent in 1947, and 62 per cent in 1948. Under the pressure of these increases, a general wage advance of 50 per cent was decreed by the wage control authorities in August 1944, followed by others of 40 per cent in March 1945, 30 per cent in June 1946, 60 per cent during 1947, and 15 per cent in 1948.

[5] Obligations issued to finance re-equipment; they are given a rediscount guaranty in order to induce the commercial banks to accept them.

[6] Bills drawn on the Caisse Nationale de Crédit Agricole in connection with the financing of the wheat harvest.

[7] Bills drawn by the Treasury on individuals and corporations, such as bills drawn on importers for customs duties owed by them. Normally the Treasury holds such bills until maturity, but it occasionally cashes them at the Bank of France when in need of funds.

In 1949, however, the situation seemed on the whole to have become stabilized: a general wage increase was averted, and prices remained largely unchanged, the year-end wholesale price index being only 1.4 per cent above the December 1948 level. In 1950, the wholesale price index increased by less than 2 per cent in the first half of the year, although in the third quarter it rose by 11 per cent. Recent price developments reflect partly the impact of the 1949 devaluation, partly the rise in world commodity prices consequent upon the Korean crisis, partly a rise in agricultural and industrial prices in France itself.

TABLE I.—MONEY SUPPLY
(In billions of francs)

	1947 Dec.	1948 Sept.	1948 Dec.	1949 Dec.	1950 Sept.
Currency	921	911	993	1,301	1,496
Demand deposits	740	1,038	1,175	1,411	1,431
Of which:					
Private deposits with Bank of France	*47*	*54*	*66*	*79*	*54*
Commercial bank deposits	*608*	*856*	*966*	*1,145*	*1,167*
Deposits with Postal Clearing Account	*85*	*128*	*143*	*187*	*210*
Total money supply outstanding	1,661	1,949	2,168	2,712	2,927

	1947	1948	1949	Jan.–Sept. 1950	Sept. 1948–Sept. 1950
Net increase	+322	+507	+544	+215	+978
Per cent increase	+ 24	+ 31	+ 25	+ 8	+ 50

Note: The September 1950 data are adjusted for end-of-the-month settlements.

The relative price stability brought with it new confidence in the French franc. The so-called "parallel" or black-market exchange rate, which reached a peak in December 1948 of 545 francs to the dollar (representing a premium of 71 per cent over the official free-market rate), stood in mid-June 1950 at 351 francs, only 0.34 per cent over the free rate; at the end of September 1950, however, it was 377 francs. The Paris quotation of the 1-kilogram bar of fine gold in mid-June 1950 was some 49 per cent lower than in December 1948, when it had reached its high mark. The price of gold in Paris, of course, increased after the Korean crisis, the 1-kilogram bar rising 14 per cent from mid-June to the end of September 1950.

Meanwhile, three good agricultural crops, coupled with a sustained high level of industrial output, have greatly improved the domestic supply situation. Prewar consumption standards have been largely al-

though perhaps not yet entirely restored, while new investment is currently running at a record level.[8] Direct government controls over personal consumption and industrial materials were abolished in 1948 and

TABLE II.—SOURCES OF INCREASE IN THE MONEY SUPPLY

(In billions of francs)

	Change during				
	1947	1948	1949	Jan.-Sept. 1950	Sept. 1948–Sept. 1950
Gold[a]	− 30	—	—	+118	+118
Foreign exchange	—	—	+ 49	+127	+176
Deposits of Postal Clearing Account with the Treasury	+ 23	+ 58	+ 44	+ 23	+ 82
Bank credit	+287	+484	+460	+ 34	+641
Of which:					
To government[b]	*+143*	*+104*	*+111*	*− 12*	*+118*
To business[b]	*+182*	*+380*	*+349*	*+ 46*	*+523*
Miscellaneous	+ 4	− 35	− 9	− 87	− 39
Net increase	+322	+507	+544	+215	+978

[a] The rise in gold reserve in 1950 reflects the revaluation that took place in August 1950. This bookkeeping change was offset by corresponding adjustments in government indebtedness and other items, as is explained below. For a translation of the relevant text and for brief comments, see *Federal Reserve Bulletin*, September 1950, p. 1132.

[b] For detailed composition of bank credit to government and business, see Table III.

Note: The September 1950 data are adjusted for end-of-the-month settlements.

1949. This internal stabilization has been reflected in signs of a buyer's market in large parts of the economy. France has likewise made great progress toward a self-sustaining international position. The balance-of-payments deficit of the French franc area was greatly reduced in 1949; and further substantial improvement took place in 1950.[9] By the

[8] Since its primary emphasis is on credit control, this article refrains from describing French economic recovery in general. For those interested in the broad picture of France's economy, reference may be made to the current issues of *Etudes et Conjoncture* (Institut National de la Statistique et des Etudes Economiques). A very convenient summary of statistical data on France can also be found in the *Economic Survey of Europe in 1949* (Economic Commission for Europe, Geneva, 1950), *European Recovery Program—Second Report of the OEEC* (Paris, 1950), and in the OEEC's report on *International Financial Stability in Member Countries* (Paris, 1950).

[9] The balance-of-payments deficit of the French-franc area in current transactions (goods and services) was equivalent to 168 million dollars in the first half of 1950, as against 706 million in the entire year 1949 and 1,737 million in 1948. The January-June 1950 deficit consisted of a short fall of 257 million in transactions with the dollar area (as against 857 million in the entire year 1949 and 1,134 million in 1948), and a net surplus of 90 million dollars in transactions with sterling and other nondollar countries (as against a surplus of 151 million in the entire year 1949 and a deficit of 603 million in 1948).

middle of 1950, France achieved, for the first time in postwar years, a surplus in its foreign trade with the rest of the world.

It is against this background of a halt in the inflationary price spiral, of internal economic recovery, and of improvement in France's international position during the last two years that the growth in the money supply must be interpreted. As a first step in the analysis of the latter, the origin of its increase is set forth in Table II.

Three principal observations may be made about Table II. First, acquisitions of foreign exchange in 1949 accounted for some 9 per cent of that year's monetary expansion; and in the first nine months of 1950 for 59 per cent. The influx of foreign exchange reflects, of course, France's improved balance-of-payments position, particularly the current-account surplus with nondollar countries, the increased dollar receipts from American tourists, and the cushioning provided by ECA aid.

Secondly, expansion of credit to the government, both by the Bank of France and by the commercial banks, was responsible for 22 per cent of the rise in the money supply from September 1948 to September 1950. This percentage would, however, be somewhat higher if the gold revaluation increment had not been partly affected in August 1950 toward extinguishing government indebtedness to the Bank of France, as will be explained later.

Thirdly, by far the most important factor in the money supply increase from September 1948 to September 1950 was the expansion in bank credit to business. This factor accounted for 64 per cent of the rise in money supply in 1949; 21 per cent between January and September 1950; and for 53 per cent of the September 1948-September 1950 increase.

III. *Bank Credit Expansion*

The character of the bank credit expansion is broadly outlined in Table III below. The upper part of the table shows the increase in bank credit to the government, the lower part the increase to business, while the respective parts played by the Bank of France and the commercial banks are also indicated.

A. Bank Credit to the Government

As clearly emerges from Table III, direct Treasury recourse to the Bank of France, which had been substantial in 1947 and 1948, was eliminated almost entirely in 1949 and 1950. The legal ceiling on current advances to the Treasury by the Bank of France was reduced from 200 billion francs to 175 billion in March 1949; actually, these ad-

vances amounted at the year-end to 158 billion francs, and on September 28, 1950 to 164 billion. Since these provisional advances serve as part of the Treasury's working capital, it is of course necessary that amounts drawn by the latter should normally be well below the credit limit in order to leave a margin for peak periods of expenditure.

The Treasury, however, also has indirect resort to the Bank of France. First of all, while the Bank of France cannot lend any more francs to the Treasury without specific approval by Parliament, it can lend the Exchange Stabilization Account as and if the latter's foreign exchange reserves increase. A large part of the foreign exchange acquired by the Fund is repurchased, under arrangements made in June 1949,[10] by the Bank of France, but some foreign exchange continues to be held by the Fund itself. Among such holdings, public reference has been made to Swiss francs and United States dollars that the French Treasury borrowed abroad in December 1949 and August 1950 for the purpose of selling to the Stabilization Fund against French francs, which the Fund borrowed from the Bank of France.[11] Through this roundabout way the French Treasury obtained French francs that the French capital market itself was not yet in a position to supply.

On various occasions in early postwar years, the Bank of France was given by the government negotiable Treasury bills. By far the largest amount was issued in 1946 and 1947 as counterpart to sales of gold to the Exchange Stabilization Fund (65 billion francs), which in turn liquidated this gold to partly finance France's balance-of-payment deficit. Other such bills were issued as counterpart to gold delivered in 1947 by the Bank of France to the Treasury for the purpose of France's gold subscription to the International Monetary Fund and the International Bank for Reconstruction and Development (12 billion). Negotiable bills were also issued as counterpart to gold that France restituted in 1944 to Belgium in lieu of gold held under earmark in France for account of the National Bank of Belgium and looted by Germany during the war (5 billion). These Treasury bills, with the exception of those delivered as counterpart to Belgian gold, were repaid in August 1950 out of the increment accruing from the revaluation of the Bank of France gold reserve. How this bookkeeping change

[10] See Robert Solomon, "The French Exchange Stabilization Fund," *Federal Reserve Bulletin*, January, 1950, page 35.

[11] The French government obtained for the National Railways a 250 million Swiss franc loan from a group of Swiss banks at the end of 1949; and 200 million dollars from a group of American banks in August 1950. An additional credit of 25 million dollars was likewise extended in August 1950 to the French Treasury by a group of American banks; but while the proceeds of the first credit were earmarked for the transaction described above, those of the second credit could be drawn upon freely.

TABLE III.—COMPOSITION OF THE BANK CREDIT EXPANSION
(In billions of francs)

	Change during				
	1947	1948	1949	Jan.–Sept. 1950	Sept. 1948–Sept. 1950
Credit to government					
By Bank of France:					
Direct advances to government	+116	+ 43	+ 5	+ 27	+ 42
Advances to the Exchange Stabilization Account	—	—	+ 40	+ 27	+ 67
Negotiable Treasury bills[a]	+ 38	—	—	− 77	− 77
Treasury bill holdings:[b]					
Rediscounts	+ 6	− 31	—	—	− 3
Open market purchases	+ 29	+ 28	+ 31	− 22	+ 16
30-day advances	+ 10	− 1	—	− 6	− 14
Subtotal	+199	+ 39	+ 76	− 51	+ 31
By commercial banks:					
Treasury bill holdings[b]	− 56	+ 65	+ 35	+ 39	+ 87
Total credit to government	+143	+104	+111	− 12	+118
Credit to business					
By Bank of France:					
Commercial bill holdings:					
Rediscounts	+ 34	+107	+131	+ 20	+195
Open market purchases	—	+ 6	+ 15	− 6	+ 12
Advances on collateral	—	—	+ 1	—	+ 1
Subtotal	+ 34	+113	+147	+ 14	+208
By commercial banks:					
Commercial bill discounts	+119	+228	+179	+ 4	+265
Loans and advances	+ 29	+ 39	+ 23	+ 28	+ 50
Subtotal	+148	+267	+202	+ 32	+315
Total credit to business	+182	+380	+349	+ 46	+523
Total credit expansion	+325	+484	+460	+ 34	+641
By Bank of France	+233	+152	+223	− 37	+239
By commercial banks	+ 92	+332	+237	+ 71	+402
Per cent increase					
Total	+ 28	+ 34	+ 23	+ 1	+ 35
To government	+ 16	+ 11	+ 10	− 1	+ 11
To business	+ 59	+ 78	+ 40	+ 4	+ 70
By Bank of France	+ 34	+ 18	+ 21	− 3	+ 23
By commercial banks	+ 19	+ 58	+ 26	+ 6	+ 49

[a] Treasury bills delivered to the Bank of France in connection with repayment of a deposit of gold by the National Bank of Belgium, subscription to the International Monetary Fund and International Bank for Reconstruction and Development, cessions of gold to the Exchange Stabilization Fund, and bills of the Caisse Autonome d'Amortissement.

[b] Including drafts on the Credit National issued to government suppliers by the Treasury in lieu of cash payments.

Note: The September 1950 data are adjusted for end-of-the-month settlements.

affected government indebtedness to the Bank of France may be clearly seen from Table III.

The Treasury has also indirect recourse to the Bank of France when the latter rediscounts Treasury bills, or buys them on the open market or extends advances against the collateral of Treasury bills, as shown in Table III. The Bank of France Treasury bill portfolio consists largely of drafts issued by the Treasury to government suppliers in lieu of cash payments—drafts which have been accepted by the Crédit National and rediscounted with the Bank of France. It is through open-market purchases, however, that the Bank of France has actually operated, these purchases in turn providing reserves for commercial bank credit expansion. However, as will be seen from the table, Bank of France Treasury bill holdings since September 1948 have not been an important source of credit expansion.

Commercial bank portfolios of government securities likewise increased in the last two years, although the rise was much smaller in 1948. These purchases, however, were made to a very large extent under the regulations of September 1948 which made it compulsory for commercial banks to invest 20 per cent of any new deposits (above the level of deposits on September 30, 1948) in short-term government securities.

With the gradual incorporation of investment expenditures and most of the other formerly extrabudgetary accounts into the over-all budget, and with the great reduction of the remaining deficit, the Treasury's recourse to the banking system has been substantially restricted, as clearly appears from Table III. Instead, the deficit has been covered to an increasing extent by new taxation, by the counterpart funds released by the Economic Cooperation Administration, and by long-term borrowing from the public.

B. Bank Credit to Business

In contrast to the extension of bank credit to the government, the expansion of bank credit to business, including medium-term credit to nationalized enterprises, has continued on a substantial scale, as may be seen from Table III. Total credit to business by the Bank of France and the commercial banks increased 523 billion francs between September 1948 and September 1950, or 70 per cent; in the calendar year 1949 the increase was 40 per cent, as against 78 per cent in 1948. However, in the first nine months of 1950, bank credit to business expanded by only 4 per cent.

Commercial bill discounts have been the principal vehicle for the rise in the credit accommodation extended by the commercial banks; and rediscounts of commercial bills by the Bank of France, rather than

open-market purchases of bank acceptances and short-term advances on collateral, have accounted for the bulk of the Bank of France expansion, as may be seen from Table IV. Rediscounts by the Bank of France are divided in this table into those that are subject, and those that are not subject, to the ceiling. The former has increased but little since September 1948; but the latter have risen substantially.

TABLE IV.—BANK OF FRANCE CREDIT EXPANSION TO BUSINESS
(In billions of francs)

	Change during			
	Oct,-Dec. 1948	1949	Jan.-Sept. 1950	Sept. 1948–Sept. 1950
Through open-market purchases of bank acceptances and short-term advances on collateral	+ 3	+ 16	− 6	+ 13
Through rediscounts:				
Subject to ceiling	+44	+ 26	+61	+195
Not subject to ceiling		+105	−41	
Total expansion	+47	+147	+14	+208

As already noted, the September 1948 regulations provided for individual rediscount ceilings for each commercial bank as well as an over-all limit for all banks. The latter, fixed originally at 188 billion francs, was maintained until the early months of 1950 when it was increased to 219 billion francs. Under the September 1948 regulations, however, certain types of bills have been exempted from the ceiling, thus being given unrestricted and unconditional access to the rediscount facilities of the Bank of France. As Table IV shows, it is the rediscounts not subject to the ceiling that have accounted for the rise in Bank of France credit to business.

Recourse to Bank of France rediscounts that are not subject to ceiling is limited, as already noted, to the specific purpose of supplying working capital to industry for re-equipment, to agriculture, and to exporters. Yet once the credit has been created, the reserves of the commercial banking system have been correspondingly enlarged and, subject to the requirement that 20 per cent of the new funds be invested in short-term government securities, the reserves have become in turn available for further credit expansion to business. In this sense, therefore, the restraining effect of an over-all rediscount ceiling has not been absolute since the creation of additional reserves consequent upon the rediscounts that are not subject to ceiling (and, as noted earlier, upon Bank of France open-market purchases) has in turn enabled the com-

mercial banks to expand their discounts and advances along with their deposits. It was by allowing the use of additional reserves that had been generated by Bank of France rediscounts granted *for a few special purposes,* that the authorities actually brought about a *general* credit expansion.

IV. *Credit Expansion and Economic Recovery*

The question thus arises why the French monetary authorities have allowed the "safety valves" provided for in the September 1948 regulations to function so as to result ultimately in a considerable general credit expansion to business. The answer can be sought in the following directions. First of all, the French authorities consider that over-all credit restrictions are a "necessary evil"[12] that can be mitigated only by leaving a special channel open for credit expansion to priority sectors of the economy—the re-equipment of industry, the financing of wheat crops, and the promotion of exports. The policy of credit restriction has thus been applied with moderation and discrimination, and seems to reflect a compromise between the requirements of rigidity in implementing quantitative credit restrictions and the practical necessity of providing working capital for priority sectors of the economy.

The French monetary authorities have, in fact, encountered very considerable resistance in implementing the restrictive credit policy. A relaxation, particularly in the form of a lifting of the ceiling on commercial bank rediscounts at the Bank of France, had been repeatedly advocated in the Paris financial press and by certain business groups. In April 1950, the National Assembly, after a brief debate, formally requested the government to relax the restrictive credit policy, despite the warning of the Secretary of State for Economic Affairs that such a course of action would be inflationary. However, the government and the Bank of France, prior to the outbreak of the Korean crisis, avoided a relaxation of controls, with one minor exception that will be noted later; and the profound change in economic climate consequent upon world rearmament has made the maintenance of over-all credit restrictions mandatory.

Great weight is attached in France to the argument that if employers were confident of their ability to obtain new credit, they would be less firm in their resistance to new wage demands. Under conditions of full employment, it is argued, wage demands are likely to be resisted more effectively if recourse to bank credit remains restricted. The restrictive credit policy since September 1948 has gone *pari passu* with the main-

[12] *Quatrième Rapport Annuel du Conseil National du Crédit* (Paris, 1950), Conclusions.

tenance of wage stability as a matter of anti-inflationary policy. Although wages remained on the whole stable in 1949, no large-scale labor unrest developed. Taking into account the family allowances and other social security benefits, real wages are believed to have been restored to the prewar level. Nevertheless, the standard of living of the broad masses of French population, except for food, is low for a great industrial nation. It was presumably for this reason that in February 1950, simultaneously with France's return to collective bargaining, wage rates were increased on the average by 5 per cent, with provision for their subsequent supplementing, in both public and private enterprises, by bonuses for productivity. It was anticipated that the restoration of collective bargaining would lead to the establishment of wage differentials and thus improve labor productivity and mobility. The freeing of wages may therefore be regarded as a final step in France's policy of eliminating controls over the internal economy.

While allowing a continued credit expansion to business, however, the French authorities have consistently endeavored to channel the new credit into the priority sectors of the economy, to prevent the resulting over-all expansion from exercising inflationary pressure.

With a view to such a channeling of new bank credit, recourse has been had to qualitative credit controls. These controls, established in 1947 and strengthened in September 1948 in conjunction with the imposition of quantitative restrictions, consist principally of two parts. First, commercial banks must obtain extensive supporting data from the borrower, and must stand ready to justify to the Bank of France, any credit whether advance or discount that exceeds a certain amount;[13] and secondly, they must submit to the Bank of France for prior approval all requests for credits other than discounts that would bring total borrowings of this type by any individual firm above 100 million francs.[14] Prior to April 1950, this limit was 50 million. This particular relaxation has thus far been the only concession that French authorities have made in the over-all controls.

The composition of bank credit as regards the broad groups of the French economy may be seen from Table V[15] The total volume of

[13] Two million francs for advances, 5 million francs for discounts. Prior to September 1948, discounts were excepted from this restriction.

[14] Discounts are not subjected to prior approval by the Bank of France, with the exception of certain special types of commercial bills ("supplier paper" or "indirect discounts").

[15] Data on the volume of credit, covering over 75 per cent of total credit outstanding, classified by groups of industry in considerable detail, are compiled by the Service for Centralization of Banking Risks (Service de la Centralisation des Risques Bancaires), a division of the Discount Department of the Bank of France. It is from this centralization of data on bank credits that individual commercial banks can learn the total amount

bank credits increased in 1949 by 50 per cent. The largest rise was in credits earmarked for equipment; of 88 billion francs of such new credits, 62 billion were extended to the private economy, largely for modernization and re-equipment, while 26 billion were granted to nationalized enterprises, almost entirely for the purpose of refinancing previous credits extended by the Treasury. Of the total bank credits outstanding, nationalized enterprises received about 13 per cent—a figure of much the same magnitude as these enterprises' share in the general economic activity of the country, whether measured by the

TABLE V.—COMPOSITION OF BANK CREDIT

Purpose	Amount outstanding in billions of francs		Per cent change
	Dec. 1948	Dec. 1949	
Equipment	125	213	+70
Imports	89	127	+42
Agriculture	119	177	+48
Subtotal	333	517	+55
All other	309	443	+44
Total	640	960	+50

business turnover (about 13 per cent) or by the labor force employed (about 10 per cent). If credits for imports outstanding at the end of 1949 (127 billion francs) are compared with the total value of imports in that year (922 billion francs), they apparently represent about one month and a half of imports. The 42 per cent rise in 1949 reflects partly the reconstitution of stocks, partly price increases reflecting the franc devaluation. The increase in credits to agriculture was due, of course, to the excellent wheat crops, farmers' deliveries being largely financed through an official discount institution. The other credits given on the fifth line of Table V represent the working capital of industrial enterprises.

This credit policy of reliance on selective discrimination has been reinforced by high interest rates. The return to a dear money policy appears all the more significant when it is realized that the official discount rate was reduced in 1945, despite the obviously large need for bank credit, to an all-time low of 1⅝ per cent, at a time when there were no credit restrictions whatever. The cheap money policy was

that each of their customers has borrowed from other banking institutions, and the Bank of France and the National Credit Council receive current data on the volume of credit authorized and utilized.

abandoned in 1947, the official discount rate being gradually raised to 3 per cent; it was reduced to 2½ per cent on June 8, 1950.[16]

The rates charged to bank customers are related to the Bank of France discount rate. For instance, banks charge a commission of 0.60 per cent per annum for the discounting of prime commercial paper; and since, prior to the recent change, the official discount rate was 3 per cent a year, the rate actually charged by banks was at least 3.60 per cent. The rates on advances, overdrafts, and other loans varied between 6 and 8 per cent. The two official institutions, the Crédit National and the Crédit Foncier, that specialize in middle and long-term credits have moved in line with the upward trend of rates, the former now charging 7 per cent for 2 to 20-year loans, the latter about 8 per cent for its mortgage loans. Large industrial borrowers who succeed in getting permits to raise new capital have to pay about 6½ per cent on 30-year bonds, with the real cost over 8 per cent.

Great emphasis was placed in the preceding section upon the expansion in Bank of France rediscounts not subject to ceiling. However, such rediscounts take place at a rate one per cent higher than the official discount rate. Accordingly, the very fact that the Bank of France has extended additional credit through this type of rediscount rather than through rediscounts subject to ceiling has been tantamount to a one per cent rise in the rate of interest at which the banks have been able to obtain additional accommodation.

The recent expansion of credit that the authorities have seemed to endeavor to keep within bounds through their dear-money and selective-credit policies may be essentially a reflection of the need of business for working capital. The consolidation of the price increases brought about by postwar inflation appears to have given rise to a shortage of working capital since larger funds than heretofore are now required for the payment of wages, holding of stocks, and granting of credits to customers.[17] Furthermore, an empty economy (to use Hicks' expression)

[16] The Bank of France rates since 1945 have been as follows:

	Jan. 19, 1945	Jan. 10, 1947	Oct. 9, 1947	Sept. 4, 1948	Sept. 30, 1948	June 8, 1950
Discount rates:						
Treasury bills* and genuine commercial bills	1.625	1.75	2.5	3.5	3.0	2.5
Other paper	1.625	2.25	3.0	4.0	3.0	2.5
Advances against securities	2.75	3.25	4.25	4.5	4.5	3.75
30-day advances	1.625	1.75	2.5	3.5	2.5	2.5
Open-market purchases (3-month Treasury bills*)	—	—	—	—	2.5	2.5

* Including similar paper, such as "traites" accepted by the Crédit National.

[17] For what they may be worth, the following statistical indications seem to reflect a shortage of means of payments in an economy operating at an all-time record level. In

which in a lapse of two years has become an economy of abundance requires of necessity additional working capital.

On the other hand, the financing of the investment in fixed capital by bank credit, which was one of the principal sources of inflation in 1946 and 1947, was greatly reduced in the last two years. Unfortunately, it appears impossible to give a comprehensive picture of the rôle of bank credit in financing France's fixed investment as a whole. A clear indication can, however, be obtained as to the financing of France's Plan for Modernization and Re-equipment (the so-called Monnet Plan), which has now been in full operation for four years.[18] Table VI shows total investments under the plan, and the methods of financing.

Of the total investment of 1,000 billion francs financed under the Monnet Plan from 1947 to 1949, 540 billion francs was supplied from public funds. Of this total, the counterpart funds released by the Economic Cooperation Administration furnished over one half—329 billion. As may be seen from the Table VI, increasing reliance has been gradually placed on the self-financing of the nationalized and private enterprises, but new capital issues have accounted thus far for only a small part of total financing. Bank credit, as appears from the last lines of the table, was particularly important in 1947 when 48 per cent of total investment was financed by borrowing from the banking system; in 1948, 10 per cent was thus financed, and in 1949, 8 per

terms of the 1938 franc, the present money supply is appreciably below prewar. For instance, at the end of 1949 note circulation and sight deposits were equivalent to 135 billion 1938 francs, as against 192 billion actually outstanding at the end of 1938; note circulation alone amounted to 65 billion 1938 francs, as against 112 billion in 1938. Bank deposits are about the same as in 1938; allowing, however, for the rise in production since 1938, it is probable that bank deposits, too, are not yet on the pre-war scale. That the money supply is now relatively smaller than before the war may also be inferred from the fact that in 1949 it was equal to 39 per cent of France's national income, as against 52 per cent in 1938. The inadequacy of the means of payment, as measured at prewar prices, is partly offset, however, by the increased velocity of circulation of bank money, which since April 1949 has been at the rate of about 1.5, as against 1.24 at the end of 1948 and 1.0 in 1938. The prevailing high level of short-term money rates seems to be an additional indication that the money supply has not yet reached an equilibrium level at which it might settle down.

[18] This plan was originally devised to speed up the rate of investment in six key industries—coal, electric power, steel, cement, agricultural machinery, and transport. As the plan evolved, it was extended to other branches of industry, either because they were found to be essentially offshoots of the original six or because further expansion was needed in order to balance France's external accounts. Agriculture has thus been added to the "basic" category, together with oil and fertilizers; economic development in France's overseas territories has also been drawn into the orbit of the plan; and special attention has been given to the chemical, nonferrous-metal and rayon industries. For a brief outline of the plan and its execution, reference may be made to Pierre Uri's contribution on "France: Reconstruction and Development" in Howard S. Ellis, *The Economics of Freedom* (New York, 1950). The Commissariat of the Plan issues public reports at regular intervals on the execution of the plan.

cent. The resort to bank credit for financing long-term investment in fixed capital has thus been greatly curtailed.

Available evidence points to the conclusion that the Monnet Plan, undertaken as it was in the absence of a sufficient budget surplus and adequate voluntary saving, has been inflationary to the extent that recourse has been had to bank credit; but the financing through bank credit has been gradually but vigorously supplanted, on the one hand,

TABLE VI.—INVESTMENT UNDER THE MONNET PLAN AND METHODS OF FINANCING
(In billions of francs)

Method of Financing	1947	1948	1949	Total
Government receipts and borrowing[a]	8	188	344	540
Of which ECA counterpart funds	—	*104*	*225*	*329*
Self-financing	30	80	104	214
Capital issues[b]	34	27	41	102
Bank credit	66	33	45	144
Total investment	138	328	534	1,000
Bank credit as percentage of total investment	48%	10%	8%	14%

[a] Apart from ECA counterpart funds, which are shown separately, this item consists of tax receipts earmarked for Monnet Plan expenditures and long-term capital issues by the Treasury.

[b] By nationalized and private enterprises; Treasury issues are included under "government receipts and borrowing."

by budgetary tax receipts earmarked for Monnet Plan expenditures and by Treasury long-term capital issues, and on the other, by capital issues by nationalized and private enterprises and by their own self-financing. The ECA counterpart funds have been paramount in this regard. However, as Marshall Aid tapers off and the counterpart funds available for investment subside correspondingly, France will have to face, altogether apart from the problem of equilibrating its payments with the dollar area, a difficult problem of internal monetary balance.

The traditional saving which in the past was a big factor in France's economic and social strength seems now to be reviving.[19] Although the

[19] Savings have been as follows:

	1948 (In billions of francs)	1949
Increase in deposits with savings banks	84	90
Increase in time deposits with banks	6	20
Net subscriptions to Treasury bills with progressive interest rates	10	30
Funds invested through life insurance and capitalization companies	15	20
Subtotal	115	160
Net subscriptions to capital issues	144	120
Total	259	280

Savings of 280 billion francs, as shown above, correspond to only 4 per cent of France's national income in 1949.

flow of saving is still much smaller in proportion to national income than before the war, it seems now to be taking forms that make it available for investment on the money and capital market. As long as prices were rising rapidly, savings went into private gold hoards[20] or real assets, while a certain clandestine export of capital also took place. With the gradual re-establishment of an internal economic balance, savings appear not only to be increasing but also to be seeking productive investment in France; and, furthermore, some French capital hiding abroad seems to have been repatriated. However, the gap between the present flow of savings and actual investment still looms very large. With the inevitable reduction in ECA counterpart funds, current savings will have to increase substantially—despite the high level of personal taxation—to be sufficient to finance the requirements of modernization and re-equipment of France's economy without recourse to continued bank credit expansion.

V. *A Preliminary Appraisal*

France's experience with credit control seems, accordingly, to warrant the following conclusions:

1. Despite credit control, the money supply has continued to expand. To some extent the rise in the money supply is due to the influx of foreign exchange which, in turn, reflects the improvement in France's balance-of-payments position. It may be of interest in this connection to quote from the conclusion of the annual report of the National Credit Council for 1948, which attaches great importance to the improvement in the balance of payments as a means for easing internal credit conditions:

> Internal credit should not be called on to provide, alone, the basis for, and the counterpart of, the necessary increase in the volume of money; it is also desirable that circumstances permit a reinforcing of the foreign exchange reserves of the Bank of France, and with it a reconstitution both of the means available for international settlements and of a currency circulation that has an unassailable backing.[21]

These principles of policy, put forward early in 1949, have since been confirmed by the reconstitution of France's foreign exchange reserves consequent upon the gradual re-establishment of its international balance.

[20] French sources, quoted by the Bank for International Settlements in its annual report for the year ended March 31, 1949 (page 155), put private gold hoards in France at the beginning of 1949 at about 2.2 billion dollars, as against 1.1 billion in 1939. In addition, Frenchmen have been privately holding sizable amounts of gold in foreign countries. Total privately held gold by Frenchmen is stated to amount to 2.5-3.0 billion dollars.

[21] *Troisième Rapport Annuel du Conseil National du Crédit* (Paris, 1949), p. 81.

2. The bulk of the rise in the money supply is, however, attributable to the intermittent recourse by the Treasury to the banking system and especially to the continued credit expansion to business. For credit restrictions to be effective, it is essential that the Treasury be able to finance its expenditures, including capital expenditures, without borrowing from the banking system. By the middle of 1950, prior to the outbreak of the Korean crisis, the stability in French government finances seemed assured for the time being, provided that anticipated tax receipts were actually forthcoming, that government expenditures were kept within the budgeted limits, that counterpart funds were released by the Economic Cooperation Administration, and that such long-term borrowing from the public as the 1950 budget contemplated actually proved feasible. Granted these conditions, one of the real handicaps against which credit control in France has had to contend would seem to have been largely removed. After Korea, with the rearmament effort that France has undertaken along with other Atlantic Pact nations, an acute problem of deficit financing has arisen again; but at this writing (November 1950), it is impossible to appraise the impact of rearmament upon France's economy.[22]

3. With reconstruction and development as a primary policy objective of the government, French credit policy has endeavored to reconcile monetary stability with the requirements of financing investments. "Credit policy must seek to harmonize the requirements of monetary rehabilitation with those arising from economic and social developments."[23] This presumably is why the control of credit has actually been so implemented as to prevent an indiscriminate credit expansion while leaving the way open, through various "safety valves," to credit expansion for priority sectors of the economy, namely the reequipment of industry, the movement of crops, and the financing of imports and exports. The Bank of France has thus prevented large-scale resort to rediscounting by industry and commerce generally, thus facilitating the over-all stabilization of prices and wages; at the same time, however, it seems to have aimed at ensuring adequate working

[22] In a note submitted to the United States government on August 5, 1950, the French government expressed the view that ". . . monetary stability, the preservation of a balanced budget and the maintenance of an adequate standard of living must be considered as elements of major importance in our defense potential. Indeed, Article 2 of the Atlantic Pact provides for close cooperation between the signatory countries in these fields. Thus, whatever the sacrifices imposed upon our population, the new effort cannot be realized without contributions of armaments, raw materials, and equipment from outside, and without substantial financial aid." On the other hand, the United States obviously cannot bear the entire burden of European rearmament. In any event, it is clear that a new phase of international economic relations opened in the fall of 1950.

[23] *Quatrième Rapport Annuel du Conseil National du Crédit*, Conclusions.

capital to the priority sectors of the economy, which in turn has facilitated appreciable progress in industrial and agricultural production and exports. This policy seems to reflect a compromise between the requirements of rigidity inherent in any effective credit restriction, and the practical necessity for flexibility under modern political, economic, and social conditions. French experience thus shows that, in present-day society, credit restrictions can be applied only with a measure of discrimination in accordance with over-all economic policies.

4. The expansion of bank credit to business in an environment of growing agricultural and industrial production, with prices generally stable amid indications of a returning buyer's market, as in France by the middle of 1950, clearly cannot be given the same interpretation as one brought about by government deficit financing or by fixed investment financing, whether public or private, under conditions of scarcity, speculative hoarding of goods, and a flight into "real assets." Furthermore, unlike 1946 and 1947 when recourse was had to bank credit to finance about one half of the investment in fixed capital, the expansion of credit to business in the last three years was primarily motivated by the necessity to replenish the working capital of industrial enterprises that had been largely wiped out by price inflation. The expansion in the money supply brought about by the creation of credit to business and, as noted earlier, by the acquisition of foreign exchange, appears to be fundamentally the result of revived confidence in the franc and of the French economy's reconstitution of liquid funds that had been reduced to a bare minimum while the currency was losing value. These factors have been important offsets to the upward pressure upon prices that had been exerted by the comparable expansion of the money supply in earlier years. To maintain the accomplishments attained since 1948, and to consolidate and expand them, seemed before the Korean crisis the crucial test of France's economic and financial policies.

5. Along with Belgium, Italy, and Germany, France has achieved internal balance and has attained over-all external equilibrium (but not a dollar balance) primarily through monetary policy, while discarding direct controls on domestic consumption and production and at the same time appreciably alleviating the controls over imports and payments abroad. The retreat from direct controls seems to have been the only course of effective economic policy open to a nation with the individualistic spirit of the French and with their experience of "endemic disorder"[24] under controlled economy. The credit restrictions

[24] *Cf.* Pierre Dieterlen, in collaboration with Charles Rist, *The Monetary Problem of France* (The Carnegie Endowment for International Peace, New York, 1948). What the

have compelled traders to release speculative stocks of goods, and exporters to sell to the authorities the full amount of their export proceeds. They have thus contributed to the elimination of the shortage of goods at home, the halting of the rise in prices, and the cutting of the balance-of-payments deficit. By restoring the regulatory power of money, operating through the price mechanism, as the main regulator of economic activities, the French authorities have thus accomplished a notable achievement under conditions of great political and social strain. It may be regarded as a practical demonstration that economic liberalism can be revived in Western Europe—a demonstration that the post-Korean international emergency must not be allowed to obscure.

6. France's experience with monetary and credit controls, together with that of Belgium, Italy, and Germany, has prompted other Western European nations both to make interest rates more flexible and to restrict credit. Since the outbreak of the Korean crisis, commercial bank reserve requirements have been introduced in Sweden and the Netherlands (and in early 1951 were under consideration in Norway). Discount rates have been raised in Denmark, Sweden, and the Netherlands (and also in Canada) for the first time in postwar years, as well as in Belgium, Germany, and Finland, where the discount rate weapon was already in use. Long-term interest rates have been allowed to rise in several countries, including Sweden and Norway, that had previously supported the market for long-term government securities. Monetary and credit controls, in conjunction with fiscal policy measures, have thus become the first line of defense against the new menace of inflation arising out of accelerated rearmament in an unsettled world.

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suppression of the price mechanism meant for France's domestic economy and international balance may be judged by the following extract from Pierre Uri (*op. cit.*, p. 256): ". . . in most sectors of the economy price fixing was little respected; only certain basic products and sectors were subject to effective control. The result was price distortions which were particularly harmful to economic recovery; for their effect was to discourage the production of basic commodities, to hinder investments in the basic sectors by depriving the latter of the necessary means of self-finance, and to make production in subsidiary sectors appear the more profitable."

ON THE MEASUREMENT OF INCOME INEQUALITY

By Robert R. Schutz*

There exist various measures of income inequality, including the Pareto and Gini coefficients and graphic representations, the Lorenz curve and the Gini ratio of concentration associated with it, several semi-logarithmic representations and others.[1] While occasional use is made of all of these coefficients and graphic devices, by far the most common over-all measurement of income inequality is found in the Lorenz curve mechanism, although it may be called a coarse and even an ambiguous measure of this important phenomenon. An attempt will be made in this paper to sharpen the concept of inequality and to set forth one or two simple refinements on the Lorenz curve technique which may lend precision to the measurement of inequality.

Equality of income distribution is found when every income-receiving unit receives its proportional share of the total income. The income-receiving unit may be further defined as an individual or a family head or a consumption unit, and may include persons at law such as corporations or not, as suits the preference of the investigator. Also, the concept of income receives a variety of treatments in the hands of different investigators; it may include various imputed items, the value of gifts and services received or self-performed; it may exclude reserves for capital depreciation, various expenses, contributions, taxes, gifts in kind; it may average in losses or not, depending on the length of the accounting period, and so on.

We will not attempt here to determine a "best" definition of the income-receiving unit, or of the concept of income itself, since it is recognized that different definitions may be required for different purposes, and the exigencies of various investigative situations may forbid the gathering of more inclusive and even superior data. It should be urged, however, that one of the legitimate ends in the study of income

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[1] For an adequate description of these measures, see Bowman, Mary Jean, "A Graphical Analysis of Personal Income Distribution in the United States," *Am. Econ. Rev.*, Vol. XXXV, No. 4 (Sept., 1945), pp. 607-28, reprinted in ***Readings in the Theory of Income Distribution*** (Philadelphia, Blakiston, 1946).

distribution is the comparison of inequality among distributions. Comparisons may be desirable following a change in taxation, or an outburst of union activity, or imposition of a farm income support plan, or institution of a new indigent-care program, or simply over time or space without imputation of causation. Such comparisons, of course, are dependent upon comparable definitions of income and of receiving units for validity. Data presently available are seriously lacking in such comparability.

Inequality may be defined as any deviation from equality. Thus, if any person received less than his proportionate share of the aggregate income, the distribution would be unequal. Furthermore, under these circumstances, some one or more other persons would have to receive as much more than his or their proportionate share(s) as the first person received less.

These simple propositions give rise to the first refinement I would propose on the Lorenz curve technique of showing inequality. It will be remembered that the Lorenz curve is based on a ranked cumulative distribution in both directions, *i.e.*, of income and numbers of recipients, giving rise to the accompanying familiar diagram:

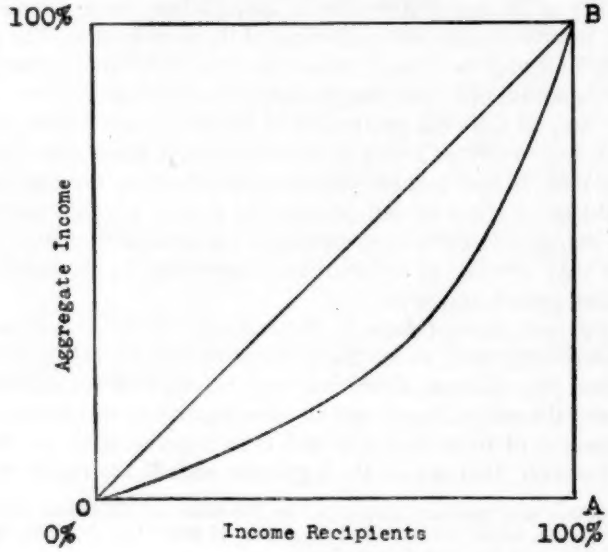

FIGURE 1. A LORENZ CURVE

Here, inequality is shown by the distance between the straight line

and the curve connecting points O and B. The Gini ratio of concentration is found by dividing the area between this line and curve by the triangular area OAB. Objections to the crudity and ambiguity of this measure arise from the fact that the shapes of these areas may be infinitely varied, due to different distributions of the inequality, without being particularly apparent to the eye, and without any change at all in the value of the ratio of concentration.

If, now, we measure inequality by comparing the amounts of income that individuals or groups get with their proportionate-equal

TABLE I.—A HYPOTHETICAL SIMPLE INCOME DISTRIBUTION

Order	Income Recipients				Income				Slope (8÷4)	(Slope−one) X Per Cent
	Number in Category		Per Cent in Category		Amount Received		Per Cent of Total			
		Cumulative		Cumulative		Cumulative		Cumulative		(Coefficient)
1	2	3	4	5	6	7	8	9	10	11
1	1	1	10	10	$ 20	20	2	2	0.2	−8.0
2	1	2	10	20	50	70	5	7	0.5	−5.0
3	1	3	10	30	80	150	8	15	0.8	−2.0
4	1	4	10	40	100	250	10	25	1.0	0
5	1	5	10	50	100	350	10	35	1.0	0
6	1	6	10	60	100	450	10	45	1.0	0
7	1	7	10	70	100	550	10	55	1.0	0
8	1	8	10	80	120	670	12	67	1.2	2.0
9	1	9	10	90	150	820	15	82	1.5	5.0
10	1	10	10	100	180	1,000	18	100	1.8	8.0

shares, we shall be dealing not with the Lorenz curve, or with its aggregate functions, but with the slopes of that curve at the various points we choose to investigate. While it is quite true that the slope of a curve at various points gives us no more information than the curve itself, I believe it will be seen in what follows that it is the slope which is directly concerned with what we wish to measure: inequality. And the direct comparison of the slopes at various points will give us a clearer picture of inequality than is ordinarily derived from the Lorenz curve. It will be admitted at once, however, that a careful study of the Lorenz curve with particular attention to the slope of the curve at various points, and without the emphasis on the comparison of areas contained in the ratio of concentration will elicit the same information, albeit in a less apparent form, as will be given by a curve of slopes.

A simplified income distribution (Table I, disregarding Column 11 for the moment) with its corresponding graphs illustrates these points.

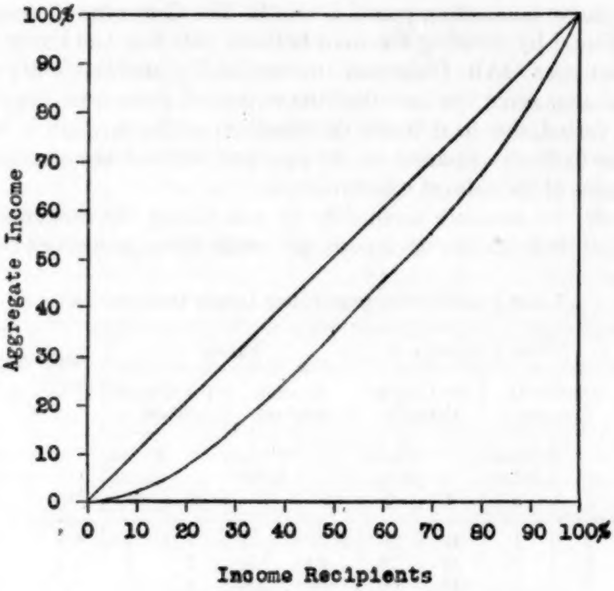

FIGURE 2. A LORENZ CURVE
Source: Columns 5 and 9 of Table I

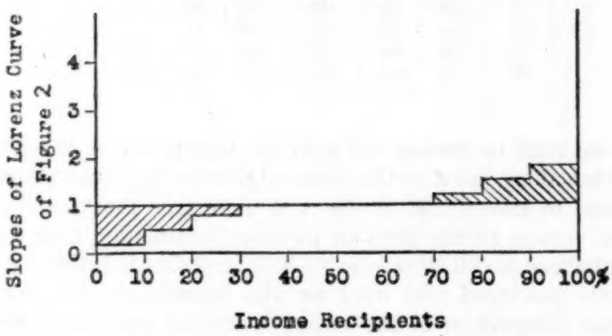

FIGURE 3. EQUALITY AND INEQUALITY CURVES COGNATE TO LORENZ DIAGRAM OF FIGURE 2
Source: Columns 5 and 10 of Table I

The Lorenz curve (Figure 2) is drawn from Columns 5 and 9 of Table I, ranked from lowest incomes to highest and cumulative in percentage. The corresponding curve of slopes at the various points (Figure 3) is drawn from Columns 5 and 10 (the latter is Column 8 divided by Column 4).

Now it will be noted that a straight line is drawn in Figure 3 at tan 45° = 1. This is the line of equality with which to compare the slopes at points in the income distribution which are unequally situated. It corresponds to the 45 degree line usually drawn in the Lorenz graph. It will be further noted that the areas on either side of the line of equality (tangent equals 1), lying between it and the curve of slopes, seem equal. That these areas are equal will become apparent upon a moment's reflection, when it is realized that in a cumulative distribution any member who receives less than his equal or proportionate share must be compensated for by one or more members who receive as much more than their equal share(s) as he did less. Thus it will be seen that total inequality, if any expression for such a phenomenon is meaningful at all—and it has long been measured as significant in the Gini ratio of concentration and other coefficients—can be measured by looking at either the "overs" or the "unders," since these are necessarily equal.

Also, here is another coefficient, the area between the line of slopes and that line denoting equality (tangent equals one), either half or all of which may be used to measure over-all inequality. This shaded area (Figure 3) is easily computed, roughly, by multiplying the distance between the two slope lines (for unequal and equal points) by the distance (in percentage of recipients) over which this slope may be assumed to hold good, that is, until the next point is reached. This is the derivation of Column 11 in Table I, which reads: (slope minus one) times (per cent), or Coefficient.[2] The sum of the negative numbers equals that of the positive, and either of these sums or their numerical

[2] This is, of course, the necessarily crude, and somewhat inaccurate form for computation of the Coefficient from actual figures in a finite number of categories. It reduces to the formula $\sum_{x=0}^{x=x_1}(\Delta x - \Delta y)$, where x is the percent of income receivers and y the percent of aggregate income received, and x_1 the point at which $\frac{\Delta y}{\Delta x} = 1$. Since the size of the Coefficient will vary with the size of the income categories used, precision may be attained by resort to the infinitesimal calculus. In this notation the formula for the Coefficient becomes $\int_0^{x_1}[1 - f'(x)]dx$, where x_1 is defined by $f'(x_1) = 1$. (The line of equality is represented in the Lorenz diagram by $y = x$; the curve of the distribution by $y = f(x)$.) Integrating from 0 to 100% would give a total of zero, since negative inequality would then cancel positive. The total referred to in the next sentence of the text is twice this formula for the Coefficient. The formula for Coefficient of inequality may be compared with Gini's concentration ratio for the Lorenz diagram, which can be written $\frac{2\int_0^{100}[x - f(x)]dx}{10{,}000}$. The integral expresses the area lying between the Lorenz curve and the line of equality; and this area is divided by the area OAB in Figure 1, that is, by one-half of the product of the two axes up to 100.

total (disregarding sign) may be used as a coefficient of inequality. The characteristics of this coefficient indicate the manner in which data from the high end of the income scale may be deemed to describe the total inequality in an income distribution.

It will be noted that the Lorenz representation of the inequality in the distribution of Table I looks decidedly asymmetrical, whereas the curve of slopes, and the data themselves seem to indicate the symmetrical distribution of inequality. This is due to the characteristics of cumulation, and will be discussed further in connection with negative incomes below.

Table II and Figures 4 and 5 illustrate the presently described techniques with the data of an actual income distribution in the United States.

TABLE II.—PERCENTAGE DISTRIBUTION OF CONSUMER UNITS AND OF AGGREGATE INCOME RECEIVED, BY INCOME LEVEL, 1935–36

Income Class	Consumer Units		Aggregate Income		Slope (4÷2)	(Slope−one) X Per Cent (Coefficient)
	Per Cent at Each Level	Cumulative	Per Cent at Each Level	Cumulative		
1	2	3	4	5	6	7
Under $250	5.38	5.38	0.50	0.50	0.0929	−4.88
250– 500	11.63	17.01	2.98	3.48	0.2562	−8.65
500– 750	14.63	31.64	6.10	9.58	0.4170	−8.53
750–1,000	14.90	46.54	8.65	18.23	0.5805	−6.25
1,000–1,250	12.65	59.19	9.42	27.65	0.7447	−3.23
1,250–1,500	9.49	68.68	8.62	36.27	0.9083	−0.87
1,500–1,750	7.32	76.00	7.87	44.14	1.0751	0.55
1,750–2,000	5.82	81.82	7.11	51.25	1.2216	1.29
2,000–2,250	4.32	86.14	6.08	57.33	1.4074	1.76
2,250–2,500	3.18	89.32	5.01	62.34	1.5755	1.83
2,500–3,000	3.74	93.06	6.76	69.10	1.8075	3.02
3,000–3,500	2.16	95.22	4.62	73.72	2.1389	2.46
3,500–4,000	1.27	96.49	3.14	76.86	2.4724	1.87
4,000–5,000	1.17	97.66	3.45	80.31	2.9487	2.28
5,000–7,500	0.96	98.62	3.79	84.10	3.9479	2.83
7,500 & over	1.38	100.00	15.90	100.00	11.5217	14.52
Total negative coefficient						−32.41
Total positive coefficient						32.41

Source: U. S. National Resources Committee, "Consumer Incomes in the United States," (Washington, Government Printing Office, 1938). Data for Columns 2, 3, 4, and 5 are given in Table 2, page 6. The others were calculated for this study.

Study of Table II and of Figures 4 and 5 reveals at a glance the well-known preponderance of inequality at the upper end of the income scale. It is further apparent that this inequality can be compared directly with that of other distributions, not only by the total coefficient,

a cognate of which has been the most commonly used mode of such comparison in the past, but by the size of the slopes, or of the areas indicated by the coefficients in various segments with base lines (per cent of the population) of equal length (*i.e.*, same relative numbers involved). In this connection, the extreme variability in size of the groups reported (minimized in the Table by lumping together "$7500 & over") will be noted. It is suggested that comparison would be greatly facilitated if the data of the various studies were arranged ac-

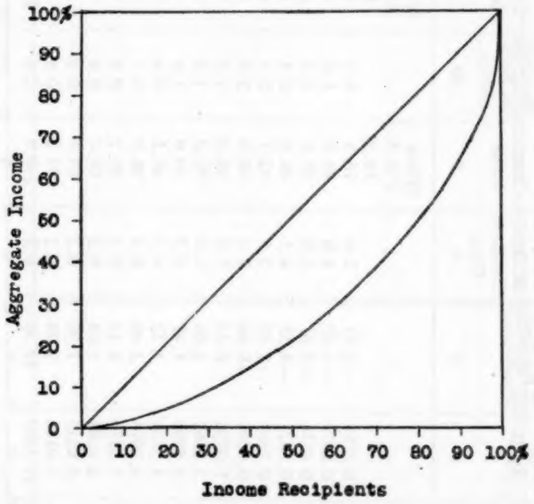

FIGURE 4. LORENZ CURVE OF 1935-36 INCOME DISTRIBUTION
Source: Columns 3 and 5 of Table II

cording to percentage of the total number involved—probably 1 per cent intervals would be adequate for most purposes—rather than in the arbitrary and variable-sized income categories now used.

With further elaboration the technique proposed may be extended to the study of inequality among and within groups classified in various ways, and to the inclusion of negative income. Multiple-way classification can be made, so long as an individual is counted but once in all of the classes. For example, one can arrange all income recipients in the order of the amounts they receive. One can further subdivide them according to their sex. Then there will be two areas below, and two above the line of equality (in the slopes diagram) if, within the sex classification, they are still arranged in order of increasing incomes.

A state classification could then be imposed on the previous two,

TABLE III.—A NUMERICAL EXAMPLE OF DOUBLE CLASSIFICATION FROM THE 1935–36 DISTRIBUTION OF INCOME BY INCOME LEVELS FOR FAMILY AND SINGLE UNITS IN THE UNITED STATES

Income Level	Family Units		Aggregate Income		Slope (4÷2)	(Slope−one) X Per Cent (Coefficient)	Single Units		Aggregate Income		Slope (10÷8)	(Slope−one) X Per Cent (Coefficient)
	Per Cent of Total Consumer Units	Cumu-lative	Per Cent at Each Level	Cumu-lative			Per Cent of Total Consumer Units	Cumu-lative	Per Cent at Each Level	Cumu-lative		
1	2	3	4	5	6	7	8	9	10	11	12	13
								(From Col. 3 74.5)		(From Col. 5 80.5)		
Under $250	2.9	2.9	0.2	0.2	0.0782	−2.71	2.4	76.9	0.3	80.8	0.1111	−2.16
250– 500	7.6	10.6	2.0	2.2	0.2579	−5.67	4.0	80.9	1.0	81.8	0.2538	−2.97
500– 750	9.6	20.2	4.0	6.2	0.4174	−5.61	5.0	85.9	2.1	83.9	0.4160	−2.92
750–1,000	10.8	31.1	6.3	12.5	0.5821	−4.53	4.1	89.9	2.4	86.3	0.5788	−1.71
1,000–1,250	9.8	40.9	7.3	19.9	0.7467	−2.49	2.8	92.7	2.1	88.4	0.7438	−0.72
1,250–1,500	7.3	48.1	6.6	26.5	0.9091	−0.66	2.2	94.9	2.0	90.4	0.9144	−0.19
1,500–1,750	5.9	54.2	6.4	32.9	1.0724	0.43	1.4	96.3	1.5	91.9	1.0797	0.11
1,750–2,000	4.8	59.0	5.8	38.7	1.2162	1.04	1.0	97.3	1.3	93.1	1.2475	0.25
2,000–2,250	3.6	62.6	5.1	43.8	1.4083	1.47	0.7	98.0	1.0	94.1	1.4028	0.29
2,250–2,500	2.6	65.2	4.2	48.0	1.5736	1.52	0.5	98.5	0.8	94.9	1.5849	0.31
2,500–3,000	3.3	68.5	6.0	54.0	1.8078	2.69	0.4	98.9	0.7	95.7	1.8049	0.33
3,000–3,500	1.9	70.4	4.0	58.0	1.1270	2.13	0.3	99.2	0.6	96.3	2.1071	0.31
3,500–4,000	1.1	71.5	2.7	60.8	2.4685	1.63	0.2	99.4	0.4	96.7	2.5000	0.24
4,000–5,000	1.0	72.5	3.0	63.8	2.9216	1.96	0.2	99.6	0.5	97.2	2.8750	0.30
5,000–7,500	0.8	73.3	3.2	67.0	3.9146	2.39	0.2	99.8	0.6	97.7	3.8667	0.43
7,500 & over	1.2	74.5	13.6	80.5	11.3000	12.36	0.2	100.0	2.3	100.0	12.3158	2.15
Over-inequality						27.62						4.72
Under-inequality						−21.67						−10.67
Excess (overs minus unders)						+ 5.95						− 5.95

Source: Columns 2 and 4 derived by computation from Tables 3, page 18, and 2, page 6 of "Consumer Incomes in the United States," *op. cit.* Columns 8 and 10 similarly derived from Tables 15, page 18, and 2, page 6, *ibid.*

giving 96 such bumps on the coefficient curve, or approaches to equality in the Lorenz curve. It will be seen that in such a Lorenz curve, *i.e.*, one constructed from a complex (multiple) classification, the curve of the distribution could cross the line of equality if the total of the "over-inequalities" to and including any group exceeded the total of the "under-inequalities" of this and all previous groups. This, of course, can not occur for a simple (single) classification. In Figure 6, in fact, such a "crossing of the line" does occur. But note that the line of equality

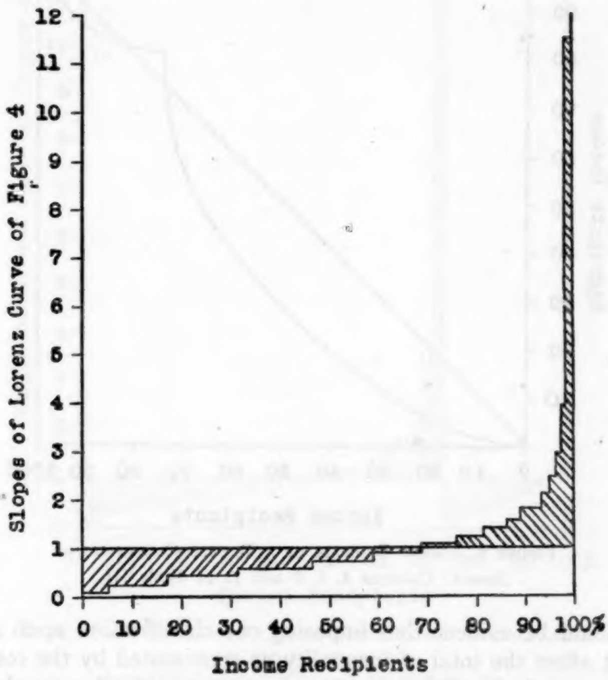

FIGURE 5. EQUALITY AND INEQUALITY CURVES COGNATE TO LORENZ DIAGRAM OF FIGURE 4
Source: Columns 3 and 6 of Table II

would not be crossed in this distribution if the single units had been listed first, since the under-inequality attaching to this group exceeds its over-inequality. The Lorenz representation is thus subject in this situation to wide and purely arbitrary variation, and the situation is one in which the slopes technique is clearly superior.

Occupational and other classifications can be further imposed on the data up until individual segregation is reached, with each income

recipient classified in all ways of interest to the investigator, a process which carried to the extreme would obviously rob it of all interest for the investigator. Perhaps useful comparisons can be derived using 3 or 4 or even 5 systems of classification. Beyond that, complexity is likely to hinder comprehension. Illustration of a double classification is presented in Table III and in Figures 6 and 7.

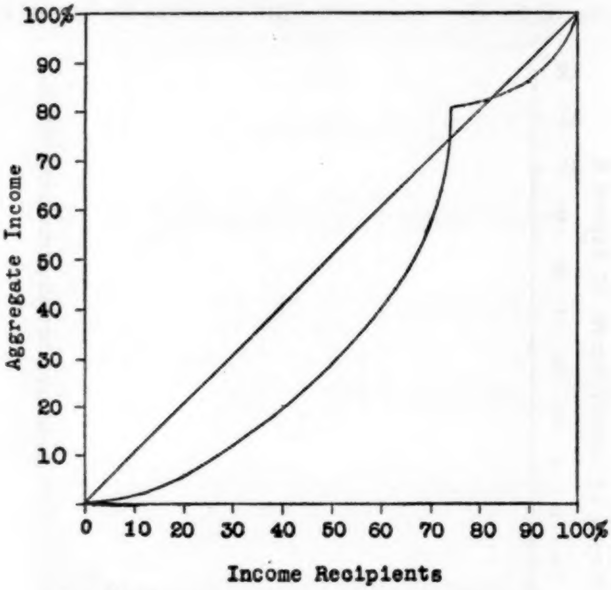

FIGURE 6. LORENZ DIAGRAM OF A DOUBLE CLASSIFICATION
Source: Columns 3, 5, 9 and 11 of Table III

It should be evident that imposing one classification upon another will not affect the total of inequality as represented by the coefficient unless such sub-classification splits a category in the former classification in which inequality was hidden. Such "hidden" inequality occurs in the Statistics of Income of the U. S. Bureau of Internal Revenue in the years since 1941, where a large portion of the income is reported on form 1040A. These recipients, who include much of the "under"-inequality in the distribution, are lumped together in a group which includes incomes of $3,000, and the total group comes out with a small "over"-inequality on balance. This may also happen in one of the large and ill-defined present categories in other distributions which may include 15 per cent or more of the income recipients, some of whom

get less than their "equal" share, and some of whom get more. In these cases the apparent inequality is reduced by the fact that in some category under- and over-inequality average out to comparative equality. If another classification is superimposed, then this reduces the popula-

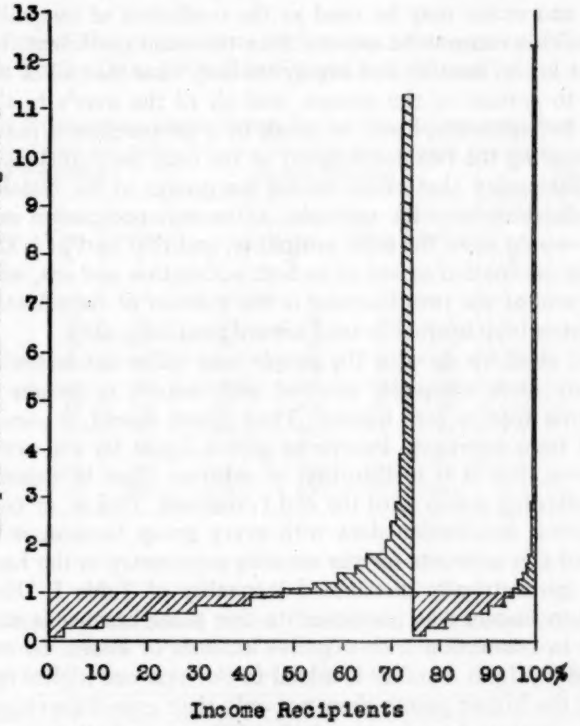

FIGURE 7. EQUALITY AND INEQUALITY CURVES COGNATE TO FIGURE 6, LORENZ DIAGRAM OF DOUBLE CLASSIFICATION

Source: Columns 3, 6, 9 and 12 of Table III

tion of each category and thereby exposes inequality which may have been "averaged in" by the previous coarse grouping.[3]

Now how is the inequality among groups in the income receivers related to the total of inequality? If one classification is imposed upon another, then the total inequality can be gotten as before by adding up the total over's or the total under's. The two sums will always be equal. The inequality among groups can be found by taking the sum

[3] *Cf.* footnote 2, and the suggestion on page 113.

of the differences between over's and under's within each group. Or, it may be arrived at more quickly by subtracting the percentage a group is of the total from the percentage of total income it receives. This is additive for any number of mutually exclusive groups. The sum of the intergroup under's will exactly equal the sum of the intergroup over's, and either may be used as the coefficient of inequality among groups. This can not be greater than the total coefficient, but can be as great in the limiting and highly unlikely case that all of the under's belong to certain of the groups, and all of the over's to the rest. It should be legitimate, then, to speak of a proportionate part (secured by comparing the two coefficients) of the total inequality as being due to the inequality that exists among the groups of the classification. A triple classification—for example, as to sex, occupation and income levels—would show the total inequality, and that part of it attributable to either occupation or sex or to both occupation and sex, which would be the sum of the two. Increase in the number of classifications would make intergroup inequality tend toward total inequality.

What shall we do with the people who suffer net losses? They are obviously more unequally situated with respect to income than even those who receive zero income. Their losses should, it seems, be subtracted from aggregate income to give a figure for the net aggregate of income. But it is a distortion to subtract them in succession from each following group until the end is reached. This is, of course, what the Lorenz distribution does with every group because it is cumulative, and this accounts for the seeming asymmetry in the Lorenz curve of the symmetrically distributed inequality of Table I. Discussion of that phenomenon was postponed to this point because it shows up so clearly in connection with negative incomes or losses. In words, each discrepancy from equality is added to the next one higher up the scale so that the higher points show not only their own differences from the line of equality, but the cumulative difference of all the points below them.

Thus, when over-inequality is encountered, it does not immediately bring the line to the other side of equality in the cumulative curve, but only begins to drag it toward that latter line. And when losses are included at the beginning, the line for the distribution does not cross the *zero* line until positive income has balanced the negative income in the distribution, although long before the zero line is reached, it is obvious that groups have been receiving positive income. Although these facts will be discerned in a careful interpretation of the Lorenz curve itself, the superiority of the individual points approach in the slopes method will, I believe, be apparent. For analogous reasons the superi-

ority of the slopes method should be apparent also when two crossing Lorenz curves are compared. The point dividing those who are relatively better off in the one distribution from those who are relatively better off in the other is not the intersection point of the two Lorenz curves. Only the slopes method makes this point immediately discernible.

Illustration of the propositions with respect to negative income will be found in Tables IV and V and in Figures 8, 9, 10, and 11.

TABLE IV.—A HYPOTHETICAL SIMPLE INCOME DISTRIBUTION ILLUSTRATING SMALL LOSSES

Income Recipients				Income Received				Slope (7÷3)	(Slope−one) X Per Cent (Coefficient)
Number 1	Cumulative 2	Per Cent 3	Cumulative 4	Amount 5	Cumulative 6	Per Cent 7	Cumulative 8	9	10
1	1	10	10	−$ 50	−$ 50	− 5	− 5	−0.5	−15
1	2	10	20	20	− 30	2	− 3	0.2	− 8
1	3	10	30	50	20	5	2	0.5	− 5
1	4	10	40	80	100	8	10	0.8	− 2
1	5	10	50	100	200	10	20	1.0	0
1	6	10	60	100	300	10	30	1.0	0
1	7	10	70	120	420	12	42	1.2	2
1	8	10	80	150	570	15	57	1.5	5
1	9	10	90	180	750	18	75	1.8	8
1	10	10	100	250	1,000	25	100	2.5	15
Coefficient of Inequality									±30

TABLE V.—A HYPOTHETICAL SIMPLE INCOME DISTRIBUTION ILLUSTRATING LARGE LOSSES

Income Recipients				Income Received				Slope (7÷3)	(Slope−one) X Per Cent (Coefficient)
Number 1	Cumulative 2	Per Cent 3	Cumulative 4	Amount 5	Cumulative 6	Per Cent 7	Cumulative 8	9	10
1	1	10	10	−$500	−$ 500	−50	− 50	−5.0	−60
1	2	10	20	− 300	− 800	−30	− 80	−3.0	−40
1	3	10	30	− 300	− 1,100	−30	−110	−3.0	−40
1	4	10	40	− 100	− 1,200	−10	−120	−1.0	−20
1	5	10	50	200	− 1,000	20	−100	2.0	10
1	6	10	60	300	− 700	30	− 70	3.0	20
1	7	10	70	300	− 400	30	− 40	3.0	20
1	8	10	80	400	0	40	0	4.0	30
1	9	10	90	500	500	50	50	5.0	40
1	10	10	100	500	1,000	50	100	5.0	40
Coefficient of Inequality									±160

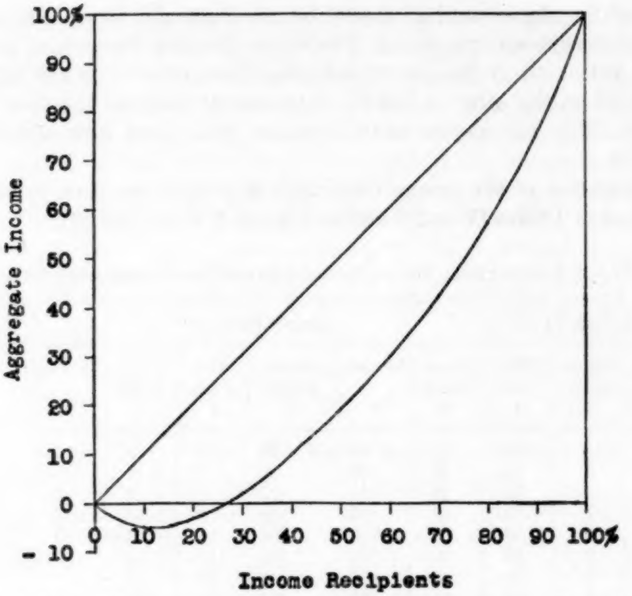

FIGURE 8. LORENZ DIAGRAM OF A HYPOTHETICAL DISTRIBUTION WITH SMALL LOSSES
Source: Columns 4 and 8 of Table IV

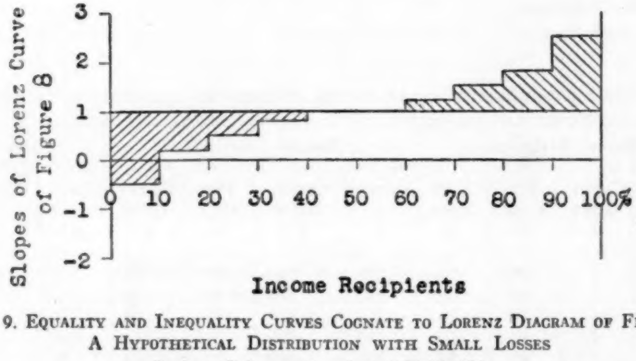

FIGURE 9. EQUALITY AND INEQUALITY CURVES COGNATE TO LORENZ DIAGRAM OF FIGURE 8. A HYPOTHETICAL DISTRIBUTION WITH SMALL LOSSES
Source: Columns 4 and 9 of Table IV

It should be remarked that comparison with the line of equality (slope of Lorenz curve equals one) is not necessarily the standard we may wish to use. It might be possible, for example, to work out a "desirable" income distribution on the basis of age differentials and differences in prices in different communities, and plot this instead of the

line of equality as a standard against which the current distribution might easily be compared by means of the coefficient and the chart of tangents.[4] Until this is done, however, the line of equality remains the

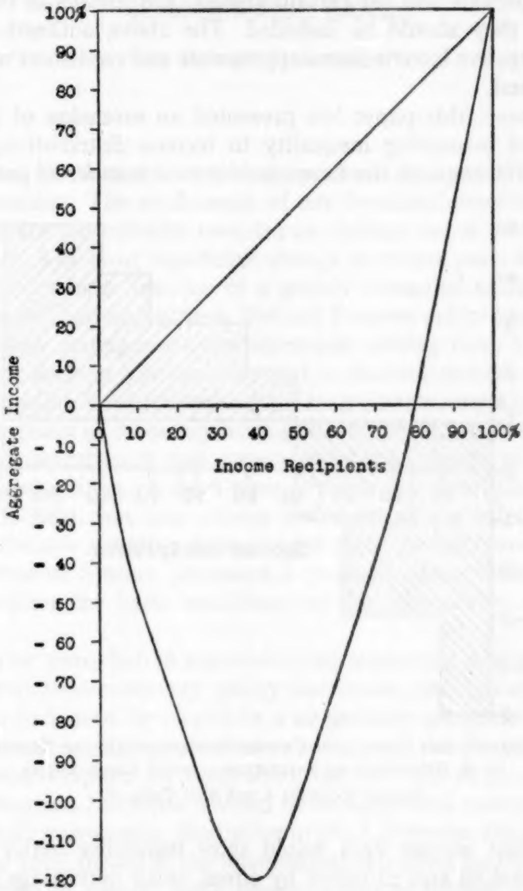

FIGURE 10. LORENZ DIAGRAM OF A HYPOTHETICAL DISTRIBUTION WITH LARGE LOSSES
Source: Columns 4 and 8 of Table V

[4] The formula for computation of the Coefficient, using as a basis for comparison a curve different from the line of equality, is

$$\int_0^{100} \left[F'(x) - f'(x)\right] dx$$

taken without regard to sign. The functional relationship of such a norm with x would have to be derived and expressed in cumulated form, of course, as is the Lorenz function.

most convenient and the most objective standard for comparison.

Negative income or losses have been treated as nuisance items, and largely ignored in studies of income distribution. However, particularly in certain periods and for certain groups, and always in the study of inequality, they should be included. The above outlined method of handling negative income seems appropriate and consistent with the rest of the method.

In summary, this paper has presented an extension of the Lorenz technique of measuring inequality in income distribution, based on computing the slope of the Lorenz curve at a number of points. It was

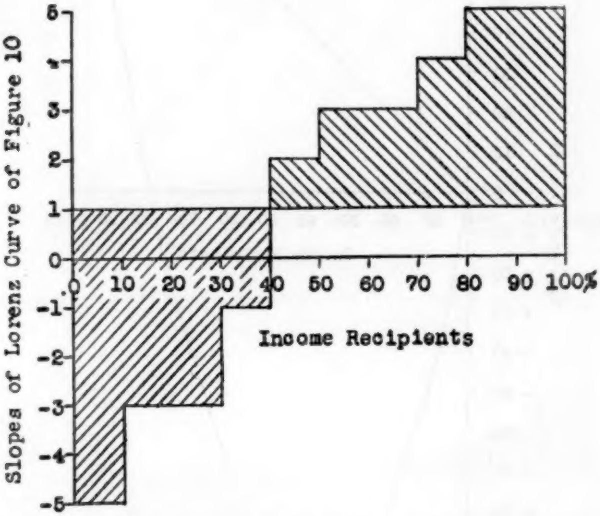

FIGURE 11. EQUALITY AND INEQUALITY CURVES COGNATE TO LORENZ DIAGRAM OF FIGURE 10. A HYPOTHETICAL DISTRIBUTION WITH LARGE LOSSES

Source: Columns 4 and 9 of Table V.

suggested that income data would show inequality better if it were presented ranked and classified by equal, small percentage increments of income receivers, rather than as is now almost universal, by coarse and variable income size classifications. Elaboration of the technique was presented to show how inequality is distributed among various sub-classifications and groups. Finally, a method of showing the effect on inequality of negative incomes was presented. It is hoped that these modest additions to technique may render the concept of income inequality more precise and understandable.

SECONDARY RESERVE REQUIREMENTS FOR COMMERCIAL BANKS

By EDWARD C. SIMMONS*

Reform of the American banking system is a perennial topic in economic discussion. The weaknesses of our fractional-reserve unit-banking system are periodically revealed as changes occur in the financial environment. The most significant change in recent years has been the absorption of a large fraction of a greatly expanded national debt by the commercial banking system. Federal Reserve policy has been dominated by debt management considerations arising from this development. Much thought has been devoted to devising reform measures to create a situation in which central banking powers may again be available for purposes of monetary management. A plan which has received considerable attention is that commercial banks should be required to hold a special reserve of short-term government securities against deposits. It is held that this reform would adapt the existing banking system to the new situation. Late in 1947 the Board of Governors of the Federal Reserve System presented a proposal along these lines. This paper considers the basic usefulness of the central idea of that proposal.[1]

Only a few years before considerations respecting debt management came to dominate monetary policy formation, the monetary control mechanism had been developed to a moderately adequate stage. Open market operations, changes in reserve ratios, and the discount rate were the available weapons for controlling the reserves of member banks. Gold sterilization had been devised to insulate bank reserves from the effects of gold movements. Beginning in 1937, however, the preservation of "orderly conditions" in the government securities market prevented the utilization of central bank powers solely to control the supply of money. Subsequently "orderly conditions" came to mean the main-

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[1] Space does not permit the treatment to be broadened to cover other proposals. Reference should be made, however, to L. H. Seltzer, "The Problem of Our Excessive Banking Reserves," *Jour. Am. Statistical Assoc.*, Vol. XXXV (Mar., 1940), pp. 24-36, where there is outlined a plan under which bank-held government securities would be converted into special non-marketable issues. Development of thinking on the bond-reserve plan is commented on by A. G. Hart, *Money, Debt, and Economic Activity* (New York, Prentice Hall, 1948), p. 449.

tenance of a level and pattern of rates on government securities. Originally a measure of wartime emergency, this doctrine, with slight modification, has persisted in the postwar period.[2]

The practical effect has been that monetary policy has not been available as an economic stabilizer in the postwar period. Those who regard monetary policy as an effective device for reducing economic instability see a need for reforming the monetary and banking apparatus to permit the restoration of central banking to its rightful purpose. Superficially, all that seems to be required is to place commercial banks under effective restraint to prevent their selling government securities in large amounts. After the war the Federal Reserve repeatedly was forced to generate new reserves as it purchased securities in the effort to maintain a predetermined level and pattern of rates.

At the outset there must be an understanding that the measure proposed by the Board of Governors would not restore the prewar situation. If the national debt is to continue in its present form of short- and long-term marketable securities, and if the market is to be kept "orderly" in the sense that the postwar market in government securities has been, there is little room left for monetary policy. With a fixed upper limit for long-term interest rates and with great rigidity in short-run rates at a level below the long-term rates, severe limits are imposed on monetary policy. Fundamentally, there is an irreconcilable conflict between monetary policy and a debt policy of the sort adopted in the United States.

The first requisite of monetary policy is maintenance of stability in the purchasing power of money. It seems unlikely that this essential condition can be fulfilled in the presence of a rigid interest rate structure, particularly when one reflects that monetary policy must operate largely through changes in interest rates. There is an apparent unwillingness to contemplate the financial revolution which is required if both the national debt and the money stock are to be managed appropriately.[3] The achievement of a state of affairs where public debt policy and monetary policy both contribute the maximum to economic stability requires greater changes than are probable. Nothing is gained by re-

[2] Official views are set forth quite fully in *Monetary, Credit and Fiscal Policies, 81st Congress, 1st Session, Joint Committee on the Economic Report* (1949). See especially the text of the statement of the Secretary of the Treasury and the Chairman of the Board of Governors of the Federal Reserve System.

[3] H. C. Simons outlined a possible system of monetary and financial arrangements, under which government debt would exist only in two forms, circulating money and long-term debt. Management would be directed toward price stability. See *Economic Policy for a Free Society* (Chicago, University of Chicago Press, 1948), pp. 220-39. A somewhat similar view is set forth by Milton Friedman, "A Monetary and Fiscal Framework for Economic Stability," *Am. Econ. Rev.*, Vol. XXXVIII, No. 3 (June, 1948), pp. 245-64.

garding the measure under consideration as anything more than a means of simplifying the problem of debt management within the existing financial framework.

The Board of Governors offered its proposal as a temporary measure to meet a particular situation.[4] The idea has possibly more merit than is suggested by its being put forward on this basis. On the other hand, some of the claims made by the Board for the measure are excessive. Much can be said for the general principle that commercial banks should be required to adhere to a definite rule in managing their secondary reserves. The Board was not concerned with the matter of permanent reform of secondary reserve practices but rather with devising a control scheme which would replace existing but ineffective means of regulating bank reserves. This led it to offer a highly complex scheme and to overstate its usefulness. A simpler secondary reserve requirement of a permanent sort would be preferable and would none the less be of considerable assistance in debt management.

The Board's proposal can best be summarized by quoting from its memorandum of December 8, 1947 to the House Banking and Currency Committee.[5] The proposal was outlined as follows:

(1) Banks subject to the provisions would be required, in addition to their regular reserves, to hold a special reserve consisting of:
  (a) Obligations of the United States in the form of Treasury bills, certificates and notes (with original maturities of 2 years or less); or
  (b) Cash items, as defined in the next paragraph, to the extent that their total exceeds 20 per cent of gross demand deposits plus 6 per cent of time deposits.

(2) For this purpose cash items would include the following:
  (a) Balances with Reserve Banks, including statutory required reserves.
  (b) Coin and currency.
  (c) Cash items in process of collection.
  (d) Balances due from in excess of balances due to banks in the United States.

[4] *Cf.* E. A. Goldenweiser, *Monetary Management* (New York, McGraw-Hill, 1949), pp. 90-91. Goldenweiser suggests that the proposal was designed to develop a demand for short-term securities, but the Board's presentation of its case was not limited to this aspect.

[5] "Proposal for a Special Reserve Requirement Against the Demand and Time Deposits of Banks," *Federal Reserve Bull.*, Vol. XXXIV, No. 1 (Jan., 1948), pp. 14-23. A less detailed version was presented to the Joint Committee on the Economic Report, on November 25, 1947. *Ibid.*, Vol. XXXIII, No. 12 (Dec., 1947), pp. 1461-62. It was this statement which formed the basis for immediate discussion. The Board had the idea under consideration from early in the war period and publicly referred to it in its *1945 Annual Report* (p. 8). See G. L. Bach, *Federal Reserve Policy Making* (New York, A. A. Knopf, 1950), pp. 77-78.

(3) The special reserve requirement would apply to both demand and time deposits and would be subject to a maximum limit fixed by statute. A maximum of 25 per cent of gross demand deposits and a maximum of 10 per cent of time deposits will probably be adequate for the temporary period covered by the proposed statute.

(4) The requirement would apply to all banks receiving demand deposits, including member banks of the Federal Reserve System and non-member banks—insured and noninsured. It would not apply, however, to banks that do exclusively a savings business.

(5) The power to impose and to vary the special reserve requirement would be vested in the Federal Open Market Committee and would be limited by law to a temporary period of three years.

(6) The requirement would be introduced gradually as credit conditions warrant. The authorizing statute could provide that, after a special reserve has been established of 10 per cent against gross demand deposits and 4 per cent against time deposits, further changes would not exceed 5 per cent of gross demand deposits and 2 per cent of time deposits at one time. Ample notice should be given before the effective date of the initial application of the requirement, or of subsequent changes, to allow banks adequate time to make adjustments.

(7) The following considerations should determine the timing of the introduction of, or changes in, the special reserve requirement:
  (a) The volume and ownership of special reserve assets and of other assets readily convertible into eligible assets;
  (b) Past and prospective gold movements, currency fluctuations, or other factors causing changes in the volume of bank reserves;
  (c) Conditions in the Government securities market;
  (d) The general credit situation.

(8) Special reserves and requirements would be computed on a daily average basis for monthly periods, or for other periods by classes of banks as the Open Market Committee might prescribe. The penalty against average deficiencies in the requirement would be one-half per cent per month, payable to the United States.

(9) The Federal Open Market Committee would be authorized to issue regulations governing the administration of the requirement, to require necessary reports, and to delegate administration with respect to non-member banks to other appropriate Federal or State banking agencies.[6]

Some of these features are of no importance in the present discussion, such as locating the power to vary the requirement in the open market committee, limitation of changes to prescribed steps, authorization for differential changes, and the considerations which should govern the

[6] *Federal Reserve Bulletin*, Vol. XXXIV, No. 1 (Jan., 1948), pp. 16-17.

introduction of the plan and actions under it. The averaging principle is obviously necessary. It should be noted that the monthly period suggested exceeds the weekly and semi-monthly intervals utilized for primary reserve computations. The penalty suggested for deficiencies does not correspond with the rate for primary reserve deficiencies.[7]

Extending the plan to cover non-member banks requires brief comment. Although the effectiveness of the plan would be weakened if this were not done, it raises the question of jurisdictional conflicts among bank supervisory agencies at the federal and state levels of government. In addition, since primary reserve requirements of non-member banks are not encompassed, and since these vary widely among the states, enforcement of the measure in the non-member bank area would present administrative difficulties. A full-scale approach to the problem of non-membership in Federal Reserve System would be preferable to extension of a temporary highly complex control measure to non-member banks. The dualism of the banking system is a matter which must be passed over in the interests of brevity if other issues are to receive deserved attention.

Strong opposition was immediately stated to the Board's proposal by spokesmen for the Treasury, the New York Federal Reserve Bank and the commercial banks.[8] The Board apparently had not attempted to obtain Presidential endorsement for its proposal, and there is evidence that it would have been unsuccessful had it done so.[9] Except for the immediate discussion of the plan before Congressional Committees, the measure aroused little interest. No legislative action was initiated.

[7] The length of the averaging period and the penalty for deficiencies cannot be examined at length, but these features should probably be made uniform with the primary reserve requirements system in the interests of administrative simplicity.

[8] In the Board's prepared statement to the Joint Committee reference is made to banker opposition and the testimony of witnesses before the Congressional Committee indicates a familiarity with the plan deriving from private discussions. The Secretary of the Treasury expressed himself only in guarded words before the House Committee on Banking and Currency, but there is other scattered evidence that the Treasury strongly disapproved the plan. See *Hearings, Economic Stabilization Aids, Committee on Banking and Currency, House of Representatives, 80th Cong., 1st sess*, p. 225. See also *Monthly Letter, National City Bank*, December, 1947, pp. 137-38, where it is alleged that the Secretary of the Treasury condemned the plan before the House Committee. The testimony of the President of the New York Federal Reserve Bank is in *Hearings on S. J. Res. 157*, pp. 232-35. This is significant for it represents public disagreement between the Board of Governors and the Reserve banks. Mr. Edward Fleming and Mr. Edward Brown, both members of the Federal Advisory Council stated the commercial bankers' views before the Senate Committee, raising the charge of "socialization." None of the witnesses had anything good to say for the Board's proposal, which was associated with the personal views of the then chairman of the Board of Governors. In part the attack on the plan was directed at his general philosophy of banking regulation.

[9] G. L. Bach, *op. cit.*, p. 161. This writer indicates that it has been a matter of principle with the Board to insist on its prerogative to approach the Congress directly.

The Board of Governors did not continue to press for action on its proposal.[10]

After sketching the reasons for its inability to control the postwar expansion of bank reserves because of the necessity of supporting the government securities market, and noting that increased levels of short-term money rates would probably be ineffective in preventing banks from selling government securities, the Board urged its proposal as a highly effective monetary control device. It was said that its effect would be to lower the multiple expansion possibilities of the banking system, to open the way to raising interest rates on private credit without increasing rates on government securities, and to supplant the need for further increases in primary reserve ratios.

On these matters the Board seems to have overstated the case. The multiple by which deposits may be expanded would not be reduced unless the special reserve requirement were fixed at so high a level that banks could not obtain assets other than legal primary reserves to satisfy the special requirement.[11] With the cash assets option in the plan, no such result could be obtained. A member bank faced with inability to purchase short-term government securities would not need to hold balances at its Federal Reserve bank to satisfy the requirement. It could always sell its federal funds for a balance with a correspondent bank, thus releasing legal reserves to other banks in the system.[12] Non-member banks would be similarly affected, but since their primary reserves typically consist of cash in vault and balances with commercial banks, they would be placed under more restraint than member banks. For non-member banks, the special reserve requirement might, in the absence of a sufficiency of short-term government securities, operate as an increase in primary reserve requirements. In no event would the expansion multiple be reduced unless short-term government securities were unavailable in sufficient amounts to satisfy the requirement.

As to the view that the way would be opened to raising interest rates in the private sector of the economy while leaving interest rates on government securities unaffected, it need only be said that such an

[10] It reiterated its faith in the idea in its *1947 Annual Report* (pp. 9-10), dated April 9, 1948. On April 15, 1948 Thomas B. McCabe succeeded Marriner S. Eccles as chairman, the latter's term as chairman having expired prior to his successor's appointment to the Board of Governors. Federal Reserve policy shifted to emphasizing the need for power to increase primary reserve requirements. In replying to a questionnaire from the Joint Committee on the Economic Report, chairman McCabe did not urge enactment of the special reserve requirement. See *Monetary, Credit, and Fiscal Policies* (1949), pp. 37-38.

[11] *Cf.* E. A. Goldenweiser, *op. cit.*, p. 91.

[12] Such a transfer may be illegal under the restrictions on the payment of interest on interbank balances contained in section 19 of the Federal Reserve Act, but in view of the lack of clarity in the interpretation of what constitutes interest, no barrier seems to exist to transfers of the type suggested.

event could come about only if the supply of short-term government securities were so limited that banks would have to satisfy the special requirement by holding large amounts of cash assets. Under these circumstances, banks would presumably bid furiously for the limited supply of government securities, much as banks did in the national banking era for circulation bonds, while at the same time being unable to grant loans or acquire other earning assets.

To bring about such a situation the floating debt would have to be greatly contracted. It is not beyond the realm of possibility that the special reserve measure could be employed to bring about differential movements of rates on short-term government and private paper, but this result could be achieved only by drastic alterations in the supply of short-term government securities and bank reserves. Such a situation would probably not be created under a temporary measure by a government commission which has consistently exhibited a commendable hesitancy to embark on radical experiments.

The third claim that further increases in legal reserve ratios would be obviated is nothing more than the first claim in other words. It raises the interesting question of the probable effects of the concomitant use of the variable primary reserve ratio and the variable secondary reserve ratio if the central bank were provided with both weapons.

During the postwar period member bank reserves tended to increase because of a gold inflow, a reduction of money in circulation and purchase of government securities by the Federal Reserve banks. Normally, reduction in the portfolio of the central bank would be available to counteract the first two factors, but the Board was powerless to employ this means and was in fact obliged by its support policy to add to reserves by purchasing government securities.[13]

The variable reserve ratio is considered to be an alternative to open market operations, particularly under circumstances where large changes in excess reserves are called for.[14] In the postwar period the variable reserve ratio could not be used or used effectively. Until August, 1948 when an emergency grant of power was made to the Federal Reserve to make further increases in reserve requirements

[13] Frequent reference is made in Federal Reserve and Treasury statements to the retirement of government debt as a counterinflationary measure. While it is true that debt was retired, bank reserves do not reflect this significantly because Federal Reserve purchases in the open market generated reserves approximately at the same rate as retirement of securities held by Federal Reserve banks from Treasury surpluses destroyed reserves.

[14] It is the generally accepted view that these two monetary weapons are complementary rather than alternative. Open market operations are suitable for frequent use to produce small changes in reserve positions, the variable reserve ratio for occasional use to produce large changes.

until June 30, 1949, nothing could be done.[15] Furthermore, increases when ordered induced open market purchases by the Federal Reserve banks, because commercial banks sold government securities to adjust their reserve positions.[16] This anticipated effect was used by the Board of Governors as an argument for the special reserve requirement. Its view that new reserves would be immobilized is not correct.

On other grounds, however, it may be argued that the variable primary reserve ratio should be held in abeyance if the variable secondary reserve ratio is used. Limited experience with increases in primary reserve ratios indicates that a severe shock is administered by such changes. Presumably increases in secondary reserve requirements would have equally widespread effects. If both requirements were raised simultaneously or with only a brief interval between changes in one and the other, the operating level of the banking system would be confronted with a situation that might degenerate into chaos.

Even if, as has been the practice, reserve ratios are increased only after detailed surveys have been made to make certain that large numbers of banks will not be forced into reserve deficiencies, a substantial number of banks react by trying to gain reserves. Some banks are actually deficient and others desire to continue to hold excess reserves. Their normal method is to dispose of secondary reserves. If they were to be placed in a position where this means of reserve adjustment were impossible or highly restricted, the results might be to induce wholesale liquidation of earning assets. Whether both control devices could be used with sufficient skill to prevent such a result is problematical.

If a secondary reserve requirement without a variable feature were adopted, the effect would be to restrict somewhat the use of upward changes in primary reserve ratios as a control measure. Before ordering an increase in primary requirements, consideration would have to be given to the adequacy of banks' secondary reserves in addition to other factors.

Downward changes in requirements would present less difficult problems. Even in that case, the effect would be to present commercial banks with a suddenly changed situation. A decrease in primary reserve requirements has the result of creating a wholly new situation at the operating level of the banking system, and if the special reserve requirement were to be decreased simultaneously, the change would be further

[15] Except that the requirement against demand deposits of central reserve city banks could be increased from 20 to 26 per cent. This requirement was raised to 24 per cent in the first six months of 1948.

[16] For an analysis of the reaction to the change see *Monthly Review, Federal Reserve Bank of New York,* Vol. XXX, No. 10 (Oct., 1948), pp. 101-2.

magnified. Monetary control devices which do not have the effect of producing sudden changes in the data within which business enterprises must formulate managerial policy are to be preferred over those which do.

Since the variable reserve ratio was first used in 1936, there have been twenty-one further changes in legal reserve ratios, although only limited numbers of banks have been affected by some changes. As the impact of the legal reserve requirement on the individual bank is to control the proportion of its assets that it must hold in non-earning form, bankers sometimes interpret changes in reserve ratios as bureaucratic devices to control bank earnings. If they were confronted with a situation in which they would be subject to changes not only in the proportion of their assets which must be held in non-earning form but also with changes in the proportion of their earning assets which must be held in a specific form, they would possibly regard themselves as being unduly burdened.

The imposition of primary legal reserve requirements on banks needs no justification. Although the fundamental purpose of legal reserve requirements is to provide a means of controlling the economy's money supply, bankers concede that primary reserves are necessary in day-to-day operations.[17] Reserve requirements have been made variable to perfect the monetary control mechanism, and the principal over-all effect of this weapon has been to insulate the economic system from the impact of the gold inflow.[18] An incidental effect has been to reduce the multiple expansion possibilities of the banking system, and thus to reduce somewhat instability in the money supply. So long as the authorities utilize the variable reserve ratio only infrequently, bankers appear willing to comply with reserve requirements and to preserve the degree of voluntary cooperation required to make control of the money supply possible.[19] If a variable special reserve requirement were added to the existing arrangements, obtaining compliance might prove troublesome.

Imposition of some system of secondary reserve requirements is justifiable. In their own interests bankers should follow definite rules as

[17] *Cf.* J. M. Keynes, *A Treatise on Money* (New York, Harcourt, Brace, 1930), Vol. II, pp. 68-73.

[18] Alternatively, however, measures could have been taken to prevent the gold inflow or to absorb it by sterilization. Insulation was by no means complete. Bank reserves have expanded by more than reserve requirements have been increased.

[19] No elaborate policing is utilized to keep banks in line. Voluntary reports are made of reserve positions, and examiners check on the matter in the course of their periodical visits to banks. This is an interesting example of the effectiveness of non-punitive governmental regulation of business. The mechanism would scarcely be workable if each of thousands of banks had to be supervised closely.

to secondary reserves. In so doing they would indirectly assist the Treasury in its task of managing the national debt. If the device is to be used, bankers must accept secondary reserve requirements as they have primary reserve requirements, that is, as necessary from an operating point of view. Possibly if the Board of Governors had presented the idea of a secondary reserve requirement in a less complex form and without representing it as a panacea, a more favorable response might have been obtained. One cannot avoid concluding that a basically valid idea has been done substantial harm by the Board's handling of this matter. For some time to come anyone who proposes that banks be required to conform to statutory rules on secondary reserves will find a hostile reception for his views. Despite that consideration, a useful purpose is served by outlining a less ambitious substitute for the Board of Governors' proposal.

A secondary reserve requirement should have been incorporated in banking legislation along with primary reserve requirements. Many bank failures would probably have been prevented had banks been obliged by law to conform to such a rule.[20] Sufficient reason for the failure to incorporate this provision in law can readily be adduced. Banking theory was long dominated by the real bills doctrine, although banking practice has never conformed to it. Much of banking law represents attempts to apply this doctrine. In it there is no place for secondary reserves because bank liquidity is assured by the bank's making only short-term self-liquidating loans.[21] The concept of secondary reserves emerges only when one recognizes that the real bills doctrine is without foundation in theory or in fact and that as an operating reality banks can operate satisfactorily only if a substantial portion of their assets consists of short-term open-market paper. This recognition now extends widely among bankers although many as yet do not apply their knowledge very effectively.[22]

[20] R. G. Rodkey attributes bank failures in part to inadequate secondary reserves. See "State Bank Failures in Michigan," *Michigan Business Studies*, Vol. VII, No. 2 (1935), pp. 17-19.

[21] *Cf.* L. W. Mints, *A History of Banking Theory* (Chicago, University of Chicago Press, 1945) especially pp. 215-22. Logically, adherence to the real bills doctrine permits no recognition of secondary reserves. Bank assets consist wholly of short-term self-liquidating paper, some of which is continuously maturing. In a sense this maturing paper is the bank's secondary reserve. As the term is generally used, secondary reserve assets consist of open-market short-term paper.

[22] Statistics of bank assets do not permit determining the extent to which banks adhere to the principle of maintaining as a matter of firm policy a definite proportion of their earning assets in liquid paper. Metropolitan banks are known to be more careful than country banks. The entire matter has been confused by the policy of supporting the prices of government securities, as the effect of this policy is to provide commercial banks with long-term riskless assets. This policy operates to destroy the boundary between secondary reserve assets and earning assets generally. Facilities for borrowing upon

Another factor which explains the failure to find legal recognition of secondary reserves is the slow development of the money market. It is only since the huge expansion of the government debt that there has been available a large floating supply of short-term paper which can serve as secondary reserves. Prior to this development banks were obliged to rely for liquidity on a limited amount of bankers' acceptances, open market commercial paper, brokers' loans and long-term bonds or to depend on borrowing from Federal Reserve banks or correspondents. The banking system has operated only tolerably well, in part because secondary reserve practices developed slowly and only among the more alert of bank managements. There was actually no opportunity until recently to consider the possibility of making secondary reserves compulsory. Bankers now have become familiar with government securities and the mechanics of trading in them. An adequate supply of short-term paper can easily be provided by shaping debt management policy to meet the needs of banks for secondary reserve assets.

In recent years treatises on bank management have placed emphasis on good secondary reserve practices.[23] As yet there has not been a crystallization of thinking on the matter. Bank statements, for example, do not customarily indicate the amount of secondary reserves held, these assets being hidden in loans and investments. Bank examination standards do not embody definite rules on this matter for the guidance of examiners and bank managements. Possibly banks will in time adopt adequate secondary reserve practices voluntarily, but there is excellent precedent for accelerating this development by legislative means.

The argument that the reform is needed in the interests of sound banking may be briefly set forth. Banks which hold adequate secondary reserves are able to adjust their primary reserves quickly and easily. No bank needs to be so liquid that it can pay off its depositors on a moment's notice, but it must be prepared at all times to restore its primary reserves when a drain is imposed upon it by a shift in deposits to other banks or by cash withdrawals.[24] Under the fractional reserve

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customers' paper has a similar effect, and leads to the view that a bank's eligible paper is to be regarded as part of its secondary reserves. Under institutional arrangements of this sort it is not surprising that secondary reserve practices have not solidified.

[23] Representative examples are R. G. Rodkey, *Sound Policies for Bank Management* (New York, Ronald, 1944), pp. 19-33 and P. M. Atkins, *Bank Bond Investment and Secondary Reserve Management* (Boston, Bankers Publishing Co., 1940), pp. 254-72. Money and banking textbooks customarily devote a chapter to secondary reserves and the money market. Only works such as Rodkey or Atkins carry the matter to the point of formulating operating rules.

[24] If banks as a practical matter had to be in a position to liquidate instantaneously, fractional reserve banking would not be possible. Recognition that a large fraction of

principle of banking, decreases in deposits release only part of the primary reserves needed to meet such drains. Consequently, liquidation of earning assets is induced, unless the drain is promptly reversed.[25] Local loans cannot conveniently serve as the vehicle of adjustment because customer relationships may be damaged if the bank refuses accommodation. Long-term securities may not be relied upon because their sale on short notice may involve capital losses.

By making a practice of holding a substantial portion of its assets in the form of open market paper, a bank is well prepared to adjust its reserve position. Such assets may be disposed of promptly without appreciable loss and without damaging customer relationships. In the event of an outflow of deposits, primary reserves initially bear the burden, then the bank disposes of secondary reserve assets to restore its primary reserves, and later contracts its less liquid earning assets. When deposits increase, the excess primary reserves produced by their growth may be placed first in secondary reserve assets, and subsequently part of these may be converted into higher yield assets. From an operating point of view secondary reserves provide a convenient means of balancing day-to-day changes in primary reserves.[26] Wholly aside from the effect of a secondary reserve requirement as a means of stabilizing the ownership pattern of the floating debt, this reform is desirable in the interests of providing for efficient functioning of the banking system.

A further argument is that a secondary reserve requirement would reduce the riskiness of banking through directing bank assets into low risk paper. Under existing arrangements bank management is permitted to govern the composition of bank assets within wide limits. Aside from holding legal reserves in proportion to deposits and from

bank assets is not (and need not be) convertible into cash at once is found in the standards employed in bank examination procedure for valuation of bank assets. Current market value is largely ignored in the official standard. See *Federal Reserve Bulletin*, Vol. XXXV, No. 7 (July, 1949), pp. 776-77.

[25] For short periods of time, such liquidation may be obviated by the fact that member-bank reserve requirements are averages over weekly or semi-monthly periods. Borrowing new reserves at the central bank may also obviate liquidation of earning assets, but as member banks typically borrow on collateral notes, they require secondary reserve assets to facilitate borrowing operations.

[26] An incidental consideration is that borrowing at the central bank for normal reserve adjusting operations might be made unnecessary. Some banks already have adopted the practice of not borrowing for this purpose. See *Monthly Review, Federal Reserve Bank of New York*, Vol. XXXII, No. 3 (Mar., 1950), p. 28. If banks generally could be led to adopt the view that borrowing at the central bank should be resorted to only in emergencies, a step toward more effective central banking would have been made. Only if the central bank is in the position where it can control the generation of bank reserves, is effective monetary control possible. Restriction of borrowing to emergencies would leave the central bank free under normal conditions to act upon its own initiative through open market operations.

being prohibited by statutory stipulations from making certain types of loans or purchasing certain types of securities, bank management is given a free hand.[27] Bank examination is not based on carefully formulated principles, but tends to reflect the views of practical bankers.[28] Banking theory no longer provides a simple answer to the question as to what assets banks should hold.

The real bills doctrine, or the commercial loan theory of banking, as it is sometimes called, has fallen into discard as a practical guide to bank management. No consistent principle is reflected in banks' actual practices.[29] The small number of bank failures in recent years demonstrates that commercial banks can operate safely and profitably with their earning assets composed of types of paper which traditional banking theory does not recognize. There is badly needed a substitute for the old theory.

The now discarded theory embodied one valid point. Its emphasis on short-term lending minimized risk simply because human judgment is less imperfect for short periods of time than for long periods.[30] The adoption of a secondary reserve requirement would operate in the same direction as the old theory in that it would lead banks to hold low risk assets. A large portion of bank assets would not be affected, but a substantial gain would result from requiring banks to confine a large portion of their resources to low risk categories. Past experience with wholesale bank failures justifies obliging bank management to limit the choice of assets by means of a secondary reserve requirement.

Adoption of a secondary reserve requirement would provide an easily administered standard for bank supervision. Relatively slight modification of existing condition report forms would be required. Bank examiners would be able to determine whether or not requirements were being met, with little additional work. The rule would be readily understood both by bank managements and supervisory personnel.

[27] In recent years the composition of bank assets has undergone a marked transformation under the impact of changes in financial practices. Aside from investments in government securities, banks have expanded their real estate loans, consumer loans, and term loans to business. In the immediate postwar period they increased their loans while reducing their investments in government securities. Existing statutory controls do not operate to limit new types of bank assets to low risk paper. The large expansion of real estate loans in the postwar boom is a case in point.

[28] *Cf.* G. L. Bach, *op. cit.*, pp. 91-95, 104-10.

[29] *Cf.* R. S. Sayers, *Modern Banking*, rev. ed. (Oxford, Oxford University Press, 1947) pp. 212-33. Empiricism is the only principle, if it may be called a principle. Bankers hold those assets which experience has shown to be feasible. From time to time, new assets such as consumer loans, are added to the list.

[30] *Cf.* R. S. Sayers, *op. cit.*, p. 223. Two distinct risks are minimized. One is the risk that the borrower may not be successful. The other is the risk that interest rates may rise and cause capital losses. The latter applies especially to bank investments.

The effect of war finance was to provide banks with large amounts of secondary reserve assets. Even long-term government securities came to be virtually riskless under the support policy of the Treasury and Federal Reserve. The expansion of secondary reserves was incidental rather than intentional, but the opportunity has nonetheless arisen to undertake a fundamental reform. During the war-financing program attention was given to providing short- and medium-term government securities for bank purchase. There has been only limited success in keeping banks from absorbing long-term issues subject to depreciation in the event of a rise in interest rates.[31]

If a secondary reserve requirement had been in effect during the war, the means would have been at hand to restrain this tendency effectively. Probably it would have been necessary to increase the ratio of secondary reserves to deposits to adjust the situation to the needs of war finance, but there is no barrier to adjustment of such a bench mark in a wartime emergency. British banks voluntarily raised their conventional liquidity ratio under these circumstances. Such a change does not lead to the conclusion that the secondary reserve requirement should be made variable by administrative action as suggested by the Board of Governors.

If there is a well-established practice of maintaining a secondary reserve ratio, a useful stabilizer is at hand once the war finance emergency is over. Commercial banks then may be expected to hesitate to replace short-term government securities with long-term securities or with loans. No such constraint was felt by many banks in the United States. They were free to dispose of their low-yield wartime-acquired assets for higher yield assets. Had bank managements long been accustomed to adhering to a secondary reserve ratio, the problem of managing the debt in the postwar period would have been less troublesome. One can only regret that bank reform measures in prewar days did not embody a secondary reserve requirement or that prompt steps were not taken to introduce this reform at the close of the war.

No reason exists for not moving to adopt such a measure without further delay. The level at which the required ratio should be set presents a problem of some difficulty. The British banks prior to the war operated with a combined primary and secondary reserve ratio of approximately 30 per cent, but during the war the figure approximated 50 per cent.[32] British experience provides no guide as to the exact figure that should be set, but the prewar relationship under which the

[31] *Cf.* H. C. Murphy, ***The National Debt in War and Transition*** (New York, A. A. Knopf, 1950) pp. 92-118. This author summarizes the measures employed to restrain bank preference for long-term securities.

[32] See R. S. Sayers, *op. cit.*, pp. 34-35.

secondary reserve ratio was roughly twice the primary reserve ratio might well be used as a rough guide in framing the plan. A workable figure at which to initiate the secondary reserve requirement would have to be established by extended study of the position of banks. The exact level is not significant except as a matter of transition, provided of course, that the figure is set high enough to be meaningful. Once the system were in operation, debt policy could be formulated to provide an adequate but not excessive supply of short-term paper. Obviously the goal would be to keep the supply somewhat in excess of banks' requirements.

Discussions of secondary reserves in books on bank management suggest that each individual bank should establish the amount of its secondary reserves in reference to its own situation. Such matters as the proportion of its demand deposits to time deposits, the seasonal fluctuation in its deposits, its capital to deposit ratio and other individual considerations are given as the determining factors. If all banks are to be brought under a uniform rule as is suggested here, some banks unquestionably will be obliged to carry more secondary reserves than would be called for if each bank made a rational appraisal of its own position. Some banks will need to carry more secondary reserves than the required amount.

This entails some inequity of treatment, but no more discrimination is involved in this instance than in other phases of regulatory action. The principle is well established that the price that must be paid for the luxury of having a unit banking system is the impossibility of tailoring regulatory requirements to fit individual banks. To the extent that individual banks are prevented from realizing as large profits as they might in the absence of regulation, there is a cost element involved. This is unavoidable. An offsetting factor of some significance is represented by the decline since prewar years in the capital to deposits ratio. This weakening of banks' strength justifies a measure that enforces a minimum standard of liquidity even at the cost of a reduction in the rate of profit.

It is to be hoped that the central idea of a secondary reserve requirement which was implicit in the Board of Governors' proposal will receive further consideration. Although the immediate pressures which led the Board to bring forth its proposal have moderated, the fundamental problem remains. Commercial banks must retain indefinitely a large portion of the national debt. Properly the securities held by them should be floating-debt types. A secondary reserve requirement is the simplest way of accomplishing this. The experience of the British banks over many years in operating under such a rule, if a self-imposed one, demonstrates that it is feasible from an operating point of view.

Its contribution to the soundness of the banking system is convincing aside from the effects on debt management.

Were the secondary reserve requirement to be presented as a permanent reform measure without the complexities of the Board's proposal, commercial bankers should properly not oppose the idea. Stripped of the variability feature, the cash assets option, and other features intended to make it a substitute for the traditional monetary control weapons, the plan has much in its favor.[33] The measure will not solve the dilemma of monetary policy versus debt policy, but it will provide a useful stabilizer for one disequilibrating force.

[33] Consideration should be given to authorizing the use of open-market commercial paper, bankers' acceptances, and brokers' loans in addition to short-term government securities. Their use is customary, and their admission would not destroy the stabilizing effect of the requirement on bank ownership of government securities.

THE DISTORTING EFFECTS OF DIRECT TAXATION: A RE-EVALUATION

By Eli Schwartz and Donald A. Moore*

I.—*The Advantages of Direct Taxation*

The popularization of the indifference curve technique in economic analysis has led to the critical examination of a great many of the neoclassical conclusions. One such examination has been conducted in the field of taxation in an effort to trace the welfare effects of indirect versus direct taxation.[1] The basic neoclassical conclusion quite briefly was this: that the direct tax was less detrimental because it simply caused a loss of utility due to the reduction in disposable income at the margin, whereas the indirect tax not only did this but also distorted the choice between commodities since relative prices were no longer the same. Through the indifference curve technique it could not only be demonstrated that the distortion effect of indirect taxation existed, but that the loss in welfare might exceed the tax collections of the government.[2] It was, however, soon discovered that if a utility surface was constructed for income (*i.e.,* work) and leisure—upon which the income earner could find his best position at a going wage rate—a distortion effect could be demonstrated for the direct tax, since the direct tax changed the relative prices of work and leisure.[3]

This development would seem to leave one at a loss to choose between the direct tax and the indirect tax on an objective welfare basis, except that it was pointed out that the indirect tax was also income distorting. Although the money price of leisure is left unchanged by an indirect tax, the excise tax by raising prices reduces the real value of a given money income. That is, if collection through an indirect tax is equal to that collected through a direct tax, real income is reduced by a like amount, and thus under an indirect tax the relative *real values* of leisure and work must change.[4] The conclusion is that as long as it is assumed that an individual does not operate completely under a money illusion, an indirect tax brings about two distortions, the direct

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[1] See M. W. F. Joseph, "The Excess Burden of Indirect Taxation," *Rev. Econ. Studies,* Vol. VI, No. 3 (June, 1939), pp. 226-31; Haskell P. Wald, "The Classical Indictment of Indirect Taxation," *Quart. Jour. Econ.,* Vol. LIX, No. 4 (Aug., 1945), pp. 577-96; A. Henderson, "The Case for Indirect Taxation," *Econ. Jour.,* Vol. LVIII, No. 232 (Dec., 1948), pp. 538-53; Richard Goode, "The Income Tax and the Supply of Labor," *Jour. Pol. Econ.,* Vol. LVII, No. 5 (Oct., 1949), pp. 428-37.

[2] M. W. F. Joseph, *op. cit.*

[3] Haskell P. Wald, *op. cit.*

[4] A. Henderson, *op. cit.*

tax but one. While it is true that the direct tax distorts the choice between income and leisure, the indirect tax not only distorts this choice but also the choice between goods.

II.—*Professor Boulding's Discussion: The Ranking of Direct Taxes on a Welfare Basis*

Granting, then, the factors which indicate the welfare superiority of direct taxation over indirect taxation, we shall confine ourselves in this paper to a discussion of the comparative effects of various types of direct taxation. That is, we are interested in evaluating the welfare results of the progressive, the proportional, the regressive, and the fixed or poll tax. We take as our point of departure the model of Professor Kenneth E. Boulding in *Economic Analysis*.[5] Professor Boulding's diagram is reproduced in Figure 1.

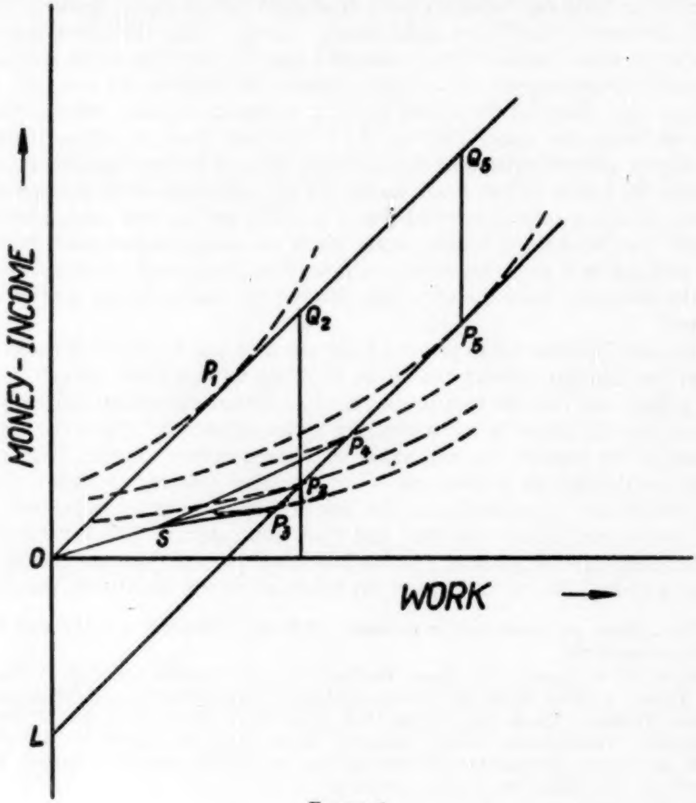

FIGURE 1

[5] Boulding, Kenneth E., *Economic Analysis*, rev. ed. (New York, Harper and Brothers, 1948), pp. 773-75.

Given OQ_2Q_5 as a rate of pay, the equilibrium position is P_1, where the rate of pay is equal to the MRS between leisure and income. Let us assume that we are to collect a tax from this individual equal to OL. One method of collecting the tax would be to levy a poll tax, leaving the rate of pay unaltered, as LP_5. Another direct tax would be a proportional income tax represented by OSP_2 which would have the effect of lowering (flattening) the rate of "take-home" pay. To extract the same amount of revenue as the poll tax does, this rate of pay must be tangent to an indifference curve at an intersection with LP_5. Thus $P_2Q_2 = OL$. Since the rate of "take-home" pay is flatter, P_2 must lie below and to the left of P_5; *i.e.*, less effort is expended and the worker enjoys a smaller net income. More important, his welfare is diminished because he must be on a lower indifference curve. This effect is greater when the income tax is progressive, as represented by OSP_3, and less when the tax is regressive, as represented by OSP_4. Given the premises of the conventional indifference curve pattern, this must necessarily be true.

Before proceeding, we wish to call attention to a relatively minor point. The indifference pattern shown in Figure 1 results in a negatively inclined supply curve for labor with the amazing effect of a heavy poll tax that causes the benighted taxpayer to work so much harder that his income after taxation is higher than if there had been no tax at all. It might be true that certain segments of the native population of South Africa or of New Guinea consider leisure a very superior good over money income; this would explain why the governments of these areas have levied a variety of head, hut and poll taxes to induce the natives to enter the price economy. It is doubtful, however, whether a large portion of the workers in an industrial society have this same attitude of extreme distaste towards income-producing work. Drawing the indifference curves with less divergence at the right would, however, eliminate this exaggeration.

Nevertheless, with any pattern of smooth indifference curves, whether the supply curve of labor is negative or positive, and as long as the absolute amount of tax to be taken from the individual is the same, the following conclusions may be reached: (1) a fixed tax or poll tax will place the individual on a higher indifference curve than any income tax, and (2) income taxes may be ranked on a welfare basis as follows, regressive, proportional and, lastly, progressive. As to the amount of work available to the community, the taxes may be ranked in the same way.

Professor Boulding concludes, ". . . that the 'best' tax on purely economic grounds is not an income tax at all but a property tax assessed on income-earning power rather than on income actually earned. The administrative difficulties of such a tax make it impossible in practice; nevertheless, the theoretical conclusion at least raises the question whether the administrative advantages of a progressive income tax on individual incomes are worth the very real economic disadvantages of such a tax."[6]

It may be, however, that Professor Boulding's proposal is not only administratively impracticable, but since income earning capacity does not always have an outward objective measure, as impossible theoretically as inter-

[6] *Ibid.*, p. 775.

personal comparison of utility. Furthermore, the economic disadvantages of the progressive income tax may not be so severe as they seem on first examination.

III.—*Critique of Professor Boulding's Ranking*

Before proceeding with the analysis, it may be well to examine the implicit assumptions of the Boulding model. The smooth indifference curve implies, first that the individual has perfect freedom of choice in the amount of work that he will perform. Secondly, it implies that he possesses no institutional bias as to the amount of work he should perform. It is doubtful whether this is true for most workers. In general, the interactions of trade unions, government, employers, and canons of respectability[7] tend to establish an accepted work week. If the acceptable work week becomes standardized at say 40 hours, the individual is reluctant to work beyond this time unless there are additional rewards.

There are two possible institutional hindrances to a free choice of working hours. One derives from the demand side of the market and is related to the exigencies of the industrial revolution. No employer, no plant manager, could possibly operate efficiently and coordinate his production effort if labor were not delivered at stated times and for stated periods of time. Thus in an industrial society the work week is likely to become standardized merely as a matter of efficiency or just to promote simplicity in bookkeeping.

The influences which operate upon the supply side are probably not as concrete. In a settled community, social habit, custom, psychology, all act to help fix the work week on the supply side. As Professor Stigler points out, cultural forces are such as to make the supply of labor from any given individual working in a given industry relatively inelastic.[8] Custom and culture set certain patterns and very few individuals feel the desire to vary these patterns indiscriminately. If the community works 40 hours a week, a given individual is not very happy working say 34 or 46 hours, and he must be given good and sufficient cause why he should do so. Unless the work week changes for the whole community, no one individual desires to work hours which differ significantly from the norm.

It is not clear in any given individual case whether the institutional bias for a standard work week derives from the supply side of the market for labor or from the demand side. The kinked indifference curves of Figure 2 represent the assumption that the institutional bias is on the supply side of the market, that is that custom and habit have fixed a socially acceptable work week. Later, the case where the bias or constraint is on the demand side will also be discussed. It may, however, be stated in advance that the main conclusions will be the same in either case.

In Figure 2, the indifference curves have a kink established at the conventional work week, let us say 40 hours. The result is that the individual offers

[7] Apropos of this, one might cite the aversion of bank tellers to the term "bankers' hours," and the vigorous defense teachers make when charged with working a short-hour week.

[8] Stigler, G. S., *The Theory of Price* (New York, Macmillan, 1946), p. 190.

40 hours per week over a significant range of wage rates. Given the kinked curves, a wage rate of "time and ½" must be offered to induce an output of over 40 hours.

All indifference curves have a kink at OY (the standard work week). Given OA as a rate of pay, the equilibrium position is Z. Let us assume a tax of OP. If this is a poll tax, the wage rate remains unchanged and all possible incomes

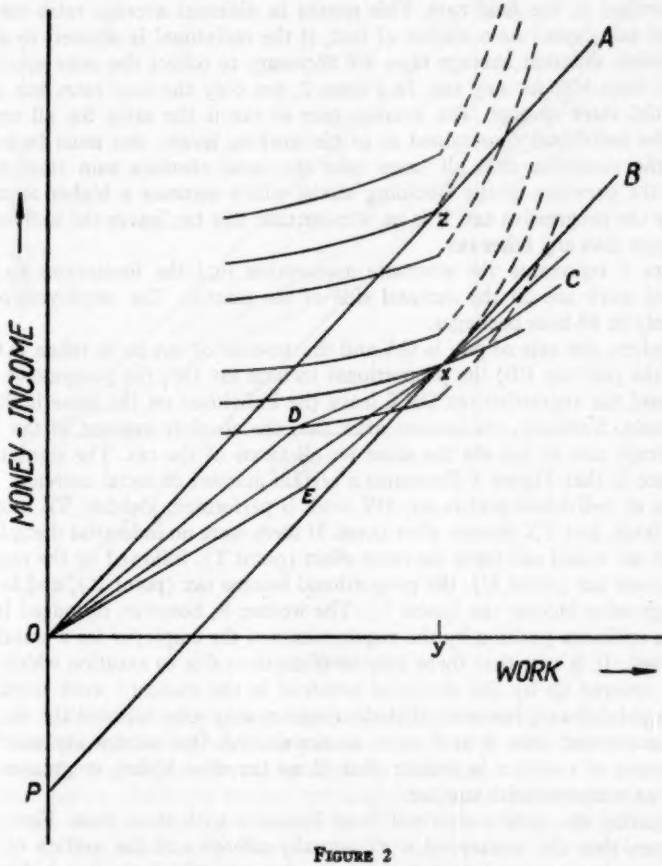

FIGURE 2

lie on the line PB. The equilibrium position is now X. ZX = OP = amount of the tax; XY = income after the tax. If the same amount is to be collected by a proportional income tax, the "take-home" rate of pay will be reduced to OC. However, due to the kink in the indifference curves, the same indifference curve must be reached as with the poll tax. The same holds true for the progressive tax ODX and the regressive tax OEX. Thus, in this model which

assumes a certain institutional bias, the individual's choice between income and leisure is unchanged, and the average rate of the tax may be made the same for all types of direct taxation. In Figure 1, where the individual was allowed to make a non-frictional choice between work and leisure, it was necessary to tax him at a much higher average rate if the same absolute amount of tax was to be collected from him by each tax shown. It is to be noted that in Figure 1 the various taxes started from the same initial rate and diverged at the final rate. This results in different average rates for all types of tax shown. As a matter of fact, if the individual is allowed to shift his position, different average rates are necessary to collect the same absolute amount from him for any tax. In Figure 2, not only the final rates but also the initial rates diverge. The average rate of tax is the same for all taxes. With the individual constrained as to his working hours, this must be so to fulfill the condition that all taxes take the same absolute sum from him. Under the premises of the Boulding model which assumes a higher average rate for the progressive tax, it is no wonder that this tax leaves the individual less happy than any other tax.

Figure 3 represents the alternate assumption that the limitations to the hours of work are on the demand side of the market. The employers offer work only in 40-hour packages.

As before, the rate of pay is OA and the amount of tax to be taken is OP. Again the poll tax PB, the proportional income tax OC, the progressive tax ODX and the regressive tax OEX leave the individual on the same indifference curve. Similarly, the income after tax, the absolute amount of tax and the average rate of tax are the same for all forms of the tax. The significant difference is that Figure 3 illustrates a certain amount of social coercion. Regardless of individual preference, OY work is performed, yielding YZ income before taxes, and YX income after taxes. If there were no industrial discipline, the poll tax would call forth the most effort (point T), followed by the regressive income tax (point U), the proportional income tax (point X), and lastly the progressive income tax (point V). The worker is, however, dislodged from his own optimum position by the requirements of the employer for a standard work week. It is true that there may be distortions due to taxation which are merely covered up by the discipline involved in the standard work week. It may be pointed out, however, that the coercion may exist without the tax, as in the movement from S to Z when no tax existed. One cannot say whether the amount of coercion is greater than if no tax were levied, or greater for one tax as compared with another.

Comparing the results obtained from Figure 3 with those from Figure 2, it appears that the amount of work actually offered and the welfare of the worker are in each case unaltered by the form in which the tax is levied. However, the assumptions underlying either model are not mutually exclusive. The true situation is probably represented by some combination of the inelastic supply of labor offered by one worker (Figure 2) and the inelastic demand for the labor of an individual (Figure 3). This does not imply zero elasticity of both the supply of and the demand for labor in the market as a whole. The combination of the effects of Figure 2 and of Figure 3 means that

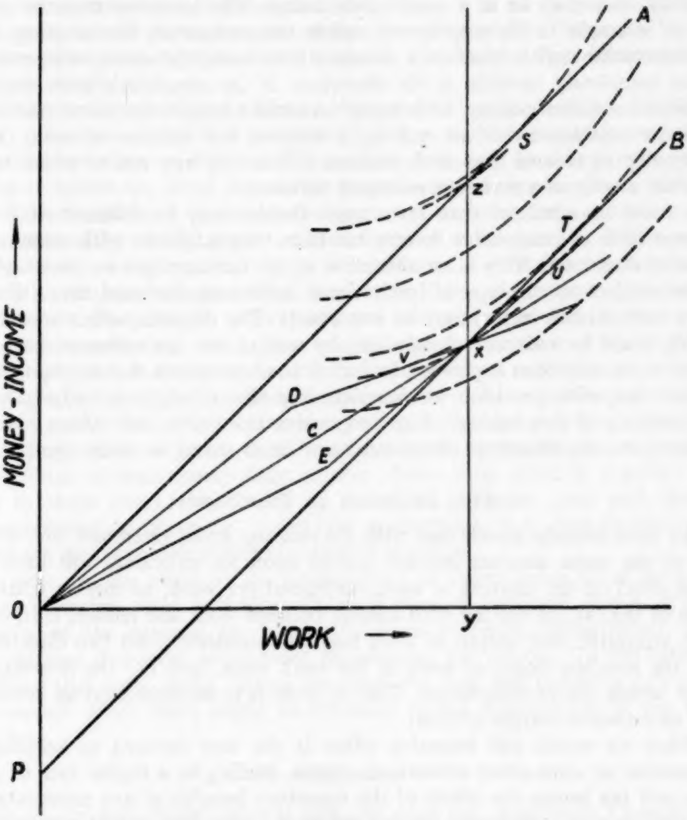

FIGURE 3

for the individual, in the short run, the length of the work week is determined by institutional factors which are more important to him than the marginal choices which could be affected by the form of the tax.

One way in which the worker can introduce some measure of elasticity in the work week is through absenteeism. One cannot deny that the progressivity of the income tax may encourage absenteeism. Nevertheless, where absenteeism is prevalent enough to constitute a problem, other factors such as war weariness, scarcities of consumer goods, and a raw labor force unaccustomed to the exigencies of industry may be more basic. Furthermore, absenteeism is atypical, and the fact that it is officially deplored may be construed as further evidence of the social pressure toward a "respectable" work week.

Institutional constraints exist even for managerial and supervisory labor,

although they may be of a more subtle nature. The executive must set some sort of example to his employees; and if the secretarial, bookkeeping, and administrative staff is hired on a standard time basis, the executive's presence is not completely variable at his discretion. If the executive's work consists mainly of decision-making, he is forced to make a certain amount of decisions (if it be considered that not making a decision is a decision of sorts). It is reasonable to assume that each decision will be the best one of which he is capable, merely as a matter of economic survival.

It must be admitted that investment choices may be different with the present form of progressive income tax than they might be with some other form of direct tax. This is an allocation of the community's resources which is not subject to the type of institutional influences discussed here (though other institutional factors may be important). The deterring effect upon risk-taking could be reduced substantially by making the tax collector share the losses more fully than at present. In fact, it has been shown that a proportional income tax, with provision for complete loss offsets, might actually increase the amount of risk taking.[9] Any progressive tax makes full offsets hard to achieve, but the deterrent effects need not be as strong as under the present tax.

IV.—*Incentives to Promotion*

We have already shown that with the existing social restraints, any direct tax of the same absolute amount placed upon an individual will have the same effect on the amount of work performed per week, no matter what the form of the tax. In dealing with choices between work and leisure, it is, however, suggested that output of work may be considered from two directions: (1) the absolute hours of work in the work week, and (2) the intensity of effort within the working hours. That is, there is to be considered an intensive and an extensive margin of effort.

What we would call intensive effort is the sort devoted to securing a promotion or some other advance in status, leading to a higher rate of pay. The poll tax leaves the whole of the monetary benefits of any promotion to the worker, and a regressive income tax would allow him to retain more than would a progressive tax. Nevertheless, given the desirability of progression between individuals, the important question is the seriousness of the effect of the progression on an individual's incentive to change his income earning power.

Given a progressive direct tax, the price, in terms of effort, of an increment to net income is higher. Considering effort and the resulting increment to income both as variables, any given *net* increment now costs more effort. Less effort will, however, be expended only if the individual's demand for increments to net income is relatively elastic. It is by no means certain that workers have elastic demands for increments to net income.[10] One would

[9] Evsey D. Domar and Richard A. Musgrave, "Proportional Income Taxation and Risk-taking," *Quart. Jour. Econ.*, Vol. LVIII, No. 3 (May, 1944), pp. 388-442.

[10] See Lionel Robbins, "On the Elasticity of Demand for Income in Terms of Effort," *Economica*, Vol. X (June, 1930), pp. 123-29; reprinted in *Readings in the Theory of Income Distribution* (Philadelphia, Blakiston, 1946), pp. 237-44.

expect some variation between individuals. Thus, it is no longer clear that the form of the direct tax has any predictable effect on this "intensive" type of effort, even when its expenditure is wholly the result of a purely monetary marginal calculation.

Defining an increment to income as a "promotion" suggests another modification. It is clear at once that many social factors modify the purely marginal comparison of effort expended and increment to income. In many cases, promotion is automatic, since the worker may be kept in grade only a limited period. Furthermore, a promotion brings many non-monetary rewards such as better working conditions, more security, and social prestige. These may be significant enough so that large reductions in the additional monetary rewards accompanying promotion may have little effect upon incentives. This may be true even in individual cases where the demand, in terms of effort, for increments to net income is quite elastic. For some of the highest income recipients, it may even be unrealistic to speak of monetary incentives. A large part of these incomes may be quasi-rents of one sort or another. To make the point clear, it is obvious that certain social groups acting mutually have a large share in fixing their incomes outside of the market, achieving monopolistic or semi-monopolistic returns. Since little effort is required to bring in these quasi-rents (being by definition payments over and above those necessary to bring the factor into production), it is obvious that the income tax can have little distorting effect in this area.

To sum up, the effect of the progressivity of direct taxes upon income-earning intensive effort is indeterminate. It depends upon the degree of the elasticity of the demand for income in terms of effort. Nevertheless, the social factors that exist supplement the demand for income. To the extent, therefore, that these social factors are operative they will minimize any loss of economic effort which might be traceable to the progressivity of the tax structure.

V.—*Conclusion*

This paper deals fundamentally with the short run, essentially a period in which the context of social factors surrounding the application of effort does not change in any considerable degree. In the short run, the imposition of a progressive tax structure is not likely to appreciably modify either the choice between income and leisure or the intensity of effort. In the long run, there is a possibility that a progressive income tax may react upon institutions themselves. There may arise, for example, certain pressures to shorten the work week. Nevertheless, since demands to shorten the work week have historically long antedated the income tax, it would be presumptious to ascribe any future shortening of the work week solely to the effects of progressive taxation. And even so, a long-run reduction of the work week need not be regarded as an unmixed evil, especially in an economy characterized by recurring unemployment.

Our basic aim has, however, been to show that an analysis of the effects of direct taxation may be considerably different in a model which allows for the introduction of certain social constraints than in a model which is ab-

stracted from them. If some institutional bias as to hours of work is allowed, effort and income are fixed before taxes. Given the fact that a socially accepted work week and standard of effort are probably readily absorbed in the individual preference pattern, social and individual frictions prevent any movement to another point of choice between work and leisure after an income tax is levied. If it is true that almost everyone has to coordinate his effort in the social complex (and most individuals probably prefer it so), then it follows that institutional factors in the main set the choice between work and leisure and that a direct tax can distort this choice but little.

The problem of the investment effects of taxation is another matter, a problem which could do with rather high-level, intensive study. Even in this field after allowing for all the social factors, it may be that the amount of distortion is not exceedingly great.

When only a few of the institutional constraints of the real world are introduced, we approach the neoclassical conclusion that the income tax is not shiftable and that it causes little distortion of resource allocation. The economist can then concern himself with the problem of achieving a rough type of distributive justice through the approximate equality of real sacrifice in the tax system. And the question of the degree of inequality of income which society should allow may be settled on its own merits.

A NOTE ON THE OVERINVESTMENT THEORY OF THE CYCLE AND ITS RELATION TO THE KEYNESIAN THEORY OF INCOME

By GEORGE A. BISHOP*

There is a family resemblance between the overinvestment theory of the expansion and downturn in the business cycle and Robertson's version of the Keynesian theory of income.[1] A comparison of these two theories suggests that a modification is necessary in the Keynesian theory (particularly in the simplified versions now current) when it is applied to the full employment or higher levels of (money) income.

I

A summary of the overinvestment cycle theory:[2] Equilibrium in the economy as a whole may be defined as equality between the flow of voluntary savings and the rate of investment. This equality tends to be maintained by changes in the rate of interest—the "natural" rate of interest is that rate which will equate the flow of voluntary saving and the rate of investment. This equilibrium is disturbed either by an increase in bank reserves which leads the banks to reduce the "market" rate of interest below the natural rate, or by an increase in the marginal efficiency of capital which raises the natural rate of interest above the market rate. In either case the difference between the two rates brings about an expansion of bank credit to finance the resulting increase in investment. The new rate of investment is larger than the flow of voluntary saving out of current income which means a rise in the money national income. The presumption is that this expansion has started from a position of full employment (unemployment being inconsistent with equilibrium). Consequently, the rise in investment can only take place through the process of bidding factors of production away from the consumption goods industries, or the "lower stages" of production. In this process the prices of the factors are bid up—the necessary result of an increase in the supply of money when total real output cannot be increased.

In equilibrium the distribution of the factors of production as between

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[1] See D. H. Robertson, "Some Notes on Mr. Keynes' General Theory of Employment," *Quart. Jour. Econ.*, Vol. LI (Nov., 1936), pp. 171-75.

[2] See J. A. Estey, *Business Cycles*, 2nd ed. (New York, 1950) Chap. 13, and the references given there. For convenience I also refer to the overinvestment theory as Hayek's theory, although he is not its only proponent and has himself produced several modifications of the early version summarized here. The overinvestment theory, as is very evident from this summary, incorporates Wicksell's monetary theory.

consumption goods and capital goods industries (to simplify the idea of the "structure of production") is determined by the proportions of their incomes which people choose to save and to spend on consumption goods. But the expansion of bank credit brings about a larger proportion of investment to total income than people currently choose to save. Unless the expansion of bank credit can go on forever, the factors of production attracted into the capital goods industries during the "boom" must eventually go back to the consumption goods industries in order for the structure of production to correspond to the proportion of their incomes which people choose to save (Hayek assumes this proportion to be constant except for the possible effects of the redistribution of real income produced by the change in prices[3]). The downturn and the depression essentially are the result of the difficulties involved in this readjustment. Such difficulties are:

> (1) Many capital goods are specific, *i.e.*, not capable of being used for other purposes than those for which they were originally planned; major losses follow then from the change in the production structure. (2) Capital values in general—*i.e.*, anticipated values of future income—are reduced by higher rates of capitalization; the owners of capital goods and property rights experience, therefore, serious losses. (3) Specific capital goods serviceable as "complementary" equipment for those lines of production which would correspond to the consumers' demand are probably not ready; employment in these lines is, therefore, smaller than it could be otherwise. (4) Marginal-value productivity of labor in shorter investment periods is lower; wage rates are, therefore, depressed. (5) Under inflexible wage rates unemployment ensues from the decreased demand prices for labor.[4]

Further analysis of the depression and revival phases of the cycle is not necessary for the purpose of this note. The main point in the above is that the downturn and depression are explained as the readjustment period in which the structure of production is, after a period of credit expansion, made to correspond once more to voluntary decisions to save and consume.

The expansion phase of the cycle in Robertson's terms: Let us say that the immediate cause of the expansion is an increase in bank credit out of which a rise in investment is financed. The rise in investment eventually brings about a higher equilibrium level of income at which once more voluntary saving is equal to the rate of investment (equilibrium is attained by a change in the level of income rather than in the rate of interest). But during the time when income is rising to its new equilibrium level investment has exceeded voluntary saving and consumers have experienced "forced saving."[5]

[3] See F. A. Hayek, "Price Expectations, Monetary Disturbances and Maladjustments," in *Readings in Business Cycle Theory* (Philadelphia, 1944), p. 359.

[4] F. Machlup, "Professor Knight and the 'Period of Production,'" *Jour. Pol. Econ.*, Vol. 43, No. 5 (Oct., 1935), p. 623.

[5] This and the following paragraph are not a summary of Robertson's analysis of cyclical expansion, but a statement of the expansion in his terminology designed to point up a paradox between the Keynesian theory and the overinvestment theory.

The "path to equilibrium" is illustrated by the following arithmetical example:[6]
(Assume $C = 50 + \frac{1}{2}Y$, $I = 75$ (a constant), where C = consumption expenditures, Y= income which can be currently disposed of, I = investment; and $Y_t = C_{t-1} + I_{t-1}$, *i.e.*, income which can be disposed of in any period equals the sum of consumption expenditures and investment in the previous period; adjustment to the given level of investment starts from a low level of income where the average propensity to consume is 100%)[7]

Period	Y	C	S	I
1	100	100	0	75
2	175	137.5	37.5	75
3	212.5	156.25	56.25	75
4	231.25	165.6	65.6	75
n	250	175	75	75

[6] The example shows adjustment to a given rate of investment starting from an equilibrium level of income where investment is zero. But the given rate of investment could also have been regarded as an increase in the rate of investment, in which case the figure for C in Period 1 would be consumption plus the existing rate of investment, and in Figure 1 the C function would be the consumption function plus the existing rate of investment (considered as an autonomous variable).

[7] The period analysis of the approach to a new equilibrium level of income can also be shown diagramatically as follows:

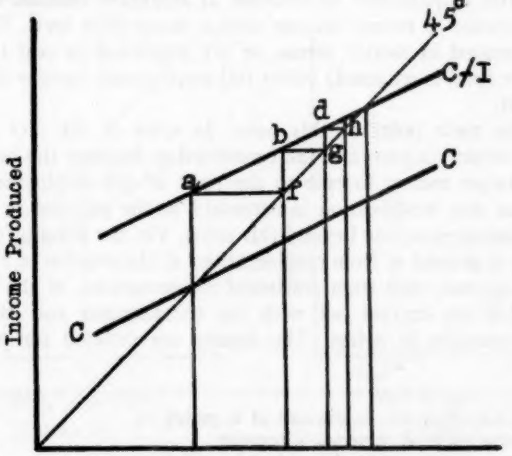

FIGURE 1

aY_1, the income produced in period 1, becomes
fY_2, the income which can be disposed of in period 2;
bY_2, the income produced in period 2, becomes

If these periods are on the average about three months long, it may take a year for a new equilibrium level of income to be closely approached after a change in investment.[8]

Putting Hayek's explanation of the expansion into Robertson's terms (or into the terms of the "instantaneous" version of the theory) raises the question of why the new rate of investment, instead of merely raising income to a new equilibrium level (as above), has to *fall* (as in the overinvestment theory) in order for a new equilibrium to be achieved. This apparent contradiction is related to the paradox—from the point of view of underconsumption theories—that the cause of the crisis is said to be a scarcity of capital or overconsumption.[9]

The difficulty appears to arise out of the lack of consideration given in Keynesian theory to what happens to the propensity to save and the rate of investment above the full employment level of income. In the diagrams by which the Keynesian theory is now explained, the usual procedure is to abstract from prices and express all the variables in real terms. In this case the savings, consumption and investment lines should logically be cut short at the income level designated as full employment. Real income cannot exceed full employment income. But these lines are often extended beyond the full employment income, particularly to show the "inflationary gap." In this case the assumption is used that an increase in aggregate demand up to full employment brings about mainly an increase in employment and real output; but beyond full employment an increase in aggregate demand brings about mainly an increase in money income with a rising price level. The variables then are expressed in money terms, or are expressed in real terms (*i.e.*, a constant price level is assumed) below full employment income and in money terms above it.

Here is the main point of this note: In spite of the fact that on the savings-investment diagram and the consumption diagram the horizontal axis shows only larger money income to the right of full employment, it is not suggested that any modification is necessary in the position or slope of the savings or consumption line beyond this point. Yet the slope of the consumption function is arrived at from considerations of the relation of real consumption to real income, and from statistical measurements of the consumption function which are carried out with the consumption and income figures deflated for changes in prices. The figures are deflated for price changes because:

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gY_3, the income which can be disposed of in period 3;
dY_3, the income produced in period 3, becomes
hY_4, the income which can be disposed of in period 4;
etc. . . . until equilibrium is reached at Y_n.

[8] The "adjustment period" depends not only on the length of the "income propagation period" but also on the size of the marginal propensity to consume or the "full" multiplier: the larger the marginal propensity to consume, the longer is the "adjustment period." See Fritz Machlup, "Period Analysis and Multiplier Theory," in *Readings in Business Cycle Theory* (Philadelphia, 1944).

[9] See F. A. Hayek, *op. cit.*, p. 360.

A doubling of *all* prices simultaneously would presumably leave each individual in the same position as previously; we should expect, therefore, no change in real quantities, abstracting from the dynamical effects of *changing* prices. Unless a correction were made for price changes, it would appear that two different observations on the consumption function were available, and that the marginal propensity to consume were equal to the average propensity to consume.[10]

The reason for price deflation suggests that the average propensity to consume above full employment should remain a constant fraction of money income—if real income stays the same, real consumption ought to be constant also. This is what Hayek's cycle theory assumes. In fact there is some support for the assumption in consumption and income figures for the 1920's. Hansen, after examining the relation of consumption to income in *current* dollars, says:

In general, one may conclude from these data that, once a fairly high income level is reached, as for the nine years referred to (1923-1929, 1937, 1939), approximately the same proportion of the income is consumed.[11]

Nevertheless, in all versions of these diagrams which the writer has seen, the consumption function is either projected straight or is given a smaller slope at levels of income to the right of that designated as full employment.[12]

If we use the assumption that the average propensity to save is constant above full employment, the savings and consumption functions appear as shown in Figures 2 and 3. The result is that the marginal propensity to save

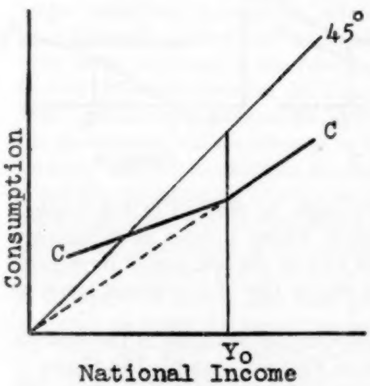

FIGURE 2

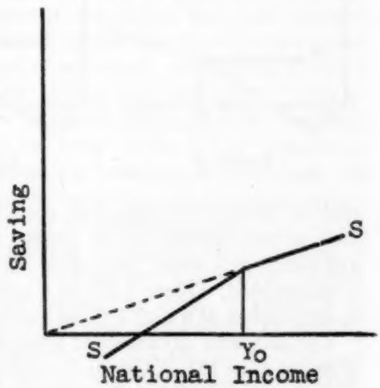

FIGURE 3

[10] P. A. Samuelson, "A Statistical Analysis of the Consumption Function," Appendix to Chapter XI, A. H. Hansen, *Fiscal Policy and Business Cycles* (1941), p. 252.

[11] *Ibid.*, p. 237.

[12] The wartime and postwar changes in the position of the consumption function plus the changing relation of disposable to national income brought about by changes in the tax structure and government transfer payments would make it very difficult to determine the slope of the function.

is less, and its reciprocal, the multiplier is greater above than below full employment. A given increase in investment therefore will have a larger effect on income. These diagrams assume a constant level of prices up to full employment income (Yo). If the variables were expressed in money terms for all ranges of income, the kink in the functions at full employment would be eliminated but the curvature of the functions would be the reverse of that often assumed.[13]

The next question should be "what is the shape of the investment function above full employment." The investment function, however, is a thorn in flesh because there are more significant variables affecting investment than there are affecting saving. The easiest way out is to consider investment an autonomous variable. On this basis some important questions can be raised. It is clear, for instance, that if investors (this case perhaps applies solely to governments in wartime) are determined to maintain the same level of real investment, the investment function will go up beyond full employment in proportion to income and prices. The result is a perfectly indeterminate level of income.[14]

The diagrams below illustrate three possibilities: Figure 4 shows a real

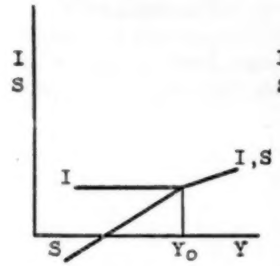

FIGURE 4

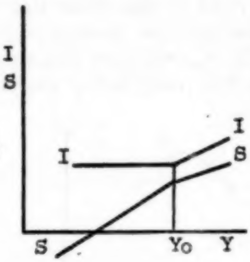

FIGURE 5

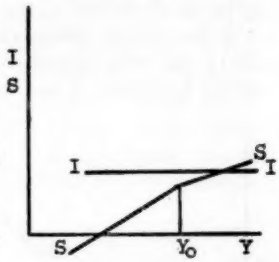

FIGURE 6

rate of investment such that equilibrium might be reached at full employment or any higher level of (money) income; Figure 5 shows an inflationary gap which gets wider (in money terms) as long as the real rate of investment is maintained; Figure 6 shows a constant money rate of investment resulting in equilibrium at a high level of income.

The following arithmetical examples make similar revisions in the example given on page 151. Example 1 corresponds to Figure 5, example 2 to Figure 6: (Assume 200 is the full employment level of income, and that above this level real income and real saving are constant so that the proportion of money income saved also remains constant. Adjustment here starts from the full employment level of income, between periods 2 and 3 in the previous example.)

[13] For example, see D. Dillard, *The Economics of John Maynard Keynes* (New York, 1948), p. 34.

[14] For a different and more complicated route to a similar conclusion see J. R. Hicks, "Mr. Keynes and the 'Classics'; a suggested Interpretation," in *Readings in the Theory of Income Distribution* (Philadelphia, 1946), p. 475.

Example 1:

Period	Y	C	S	I
1	200	150	50	75
2	225	168.7	56.3	84.3
3	253	189.7	63.3	95
4	284.7	213.5	71.2	107
5	321.5	etc.	—	—

Example 2:

Period	Y	C	S	I
1	200	150	50	75
2	225	168.7	56.3	75
3	243.7	182.8	60.9	75
4	257.8	193.4	64.5	75
n	300	225	75	75

These examples emphasize the basis for Hayek's conclusion that the higher real rate of investment which is responsible for the expansion must fall in order for equilibrium to be achieved. It rests on the assumption of a constant or fairly stable propensity to consume. The alternative to a fall in the real rate of investment, a fall in the propensity to consume, seems unlikely in peacetime but in wartime can be made an important offsetting influence.

This analysis also suggests that money income may be subject to relatively larger variations at or above full employment than below that level. Even if an inflationary rate of real investment is quickly checked by a rise in interest rates or by a change in the relative prices of consumers and capital goods, a smaller difference between the slopes of the savings and investment functions would mean larger fluctuations in income. Moreover, in the unlikely case that the government should attempt to follow the letter of the law of "functional finance," and try to maintain the full employment level of real investment, the possibility of galloping inflation would not be far away. For if private investment rose, considerable time might elapse before offsetting action was taken. One of the advantages of Robertson's version of the income theory is that it indicates a sizeable lag between a change in investment and the full change in income.[15] It means also that given the further lag in the availability of statistics we might for some time be ignorant of what was actually happening. To these lags must be added the time required for the Executive, Congress and the Federal Reserve System to take action. The alternatives for a thorough-going compensatory fiscal policy would seem to be either much more "built-in flexibility" or stand-by price and wage controls (*a la* Beveridge).

II

A communication in the *American Economic Review* for December, 1949, Franz Gehrels' "Inflationary Effects of a Balanced Budget Under Full Em-

[15] With a marginal propensity to consume of say .8 and an average income period of 3 months, the "adjustment period" would be at least two and a half years.

ployment" deals with substantially the same problem and reaches a similar conclusion. The point of the communication is that when the economy is at full employment, an increase in taxes accompanied by the same increase in government expenditures on goods and services will raise money national income by considerably more than the amount of additional tax revenues. This section is an attempt to put Gehrels' argument in terms of the above diagramatic analysis, and to suggest further implications and difficulties.

Introducing government revenues and expenditures into the diagram raises the problem of the effect of taxes on the position of the consumption function. The usual procedure is to introduce taxes by deducting them horizontally from the consumption function.[16] The result is the new consumption function after an increase in taxes. This procedure is based on the argument that out of income Y_1 people will consume after taxes, T, the same amount that they

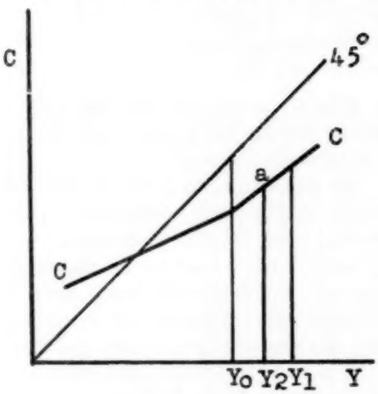

FIGURE 7

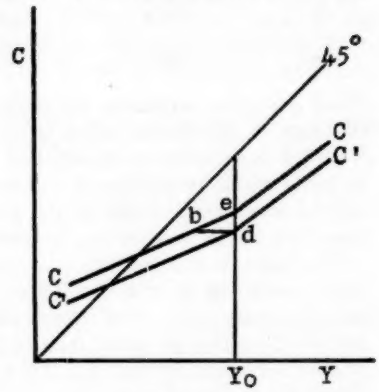

FIGURE 8

would have consumed before taxes out of income $Y_2 = Y_1 - T$. The simplifying assumption can be used that the amount of taxes is fixed, although it would be more realistic to make the amount of taxes a function of income. However, the main principles involved are not affected by using the simpler assumption.

This technique cannot be applied to the effect of taxes (or of an increase in taxes) on the consumption function above full employment for reasons which Mr. Gehrels has pointed out. In Figure 7, for example, we cannot find the shift in the consumption function by going from income Y_1 to income Y_2, with the difference between the two incomes being equal to the new taxes, T. For, if disposable income out of a given money national income is reduced, nothing happens to prices (with a given money income, aggregate demand is also given). But money income at Y_2 indicates simply a proportionately lower level of prices. Consequently, consumption expenditures at Y_1 after taxes equal to $Y_1 - Y_2$ would be larger than aY_2 for prices are higher than when income is at Y_2.

[16] See P. A. Samuelson, *Economics, An Introductory Analysis* (New York, 1948), p. 276.

How much larger would consumption expenditures be? To find out, we need to know the marginal propensity to consume in real terms. And the consumption function below full employment income, where prices are assumed constant, tells us that. The reduction in consumption then is T · mpc, where T is the amount of taxes and mpc is the marginal propensity to consume in real terms. The shift in the propensity to consume is shown in Figure 8. C′C′ is the consumption function after taxes. bd is the amount of taxes and de is the resulting reduction in consumption expenditures. (Assume for simplicity that the amount of taxes is fixed—does not depend on size of real or money income.)

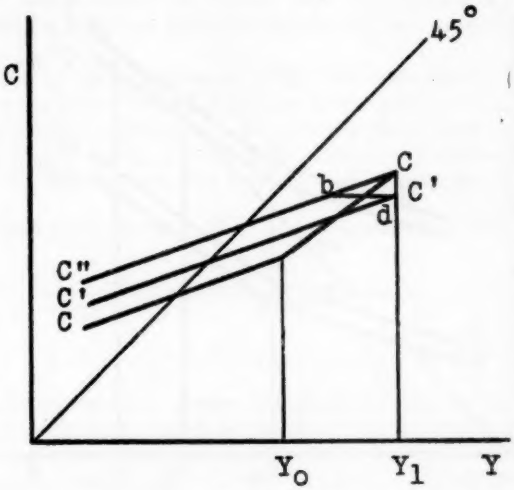

FIGURE 9

The argument can be considered in another way. The above diagrams assume that the consumption function is reversible. However, there is no reason to believe that after an inflationary rise in income, "disinflation" back to a previous level of prices is possible without causing unemployment and a decline in output. In fact, the consumption function in money terms is not likely to be reversible—a fall in prices will probably be accompanied by a fall in output and employment. Suppose, to simplify this case, that an increase in aggregate demand after full employment is reached raises only prices, but a succeeding fall in aggregate demand leaves prices at the new higher level and causes a fall in output. The diagrammatic result is shown in Figure 9.[17]

CC is the consumption function in real terms up to the full employment

[17] For a detailed discussion of the consumption function in real and in money terms, see E. C. Brown, "Analysis of Consumption Taxes in Terms of the Theory of Income Determination," *American Economic Review*, March 1950. That article does not, however, raise the point at issue in this note, namely the stability of income in the neighborhood of full employment.

income and in money terms for higher levels of income. C″C shows the consumption function in real terms but at a level of prices higher by the ratio of Y_1 to Y_0. If taxes, equal to bd, are levied (at the income level Y_1), which reduce real disposable income but do not affect the level of prices, consumption expenditures will fall by the vertical distance between C″C and C′C′, or by the amount of taxes multiplied by the marginal propensity to consume in real terms. The functions C″C and C′C′ could be drawn for all levels of money income above Y_0. But the money consumption function for *increases* in income above full employment would be as shown in Figure 8.

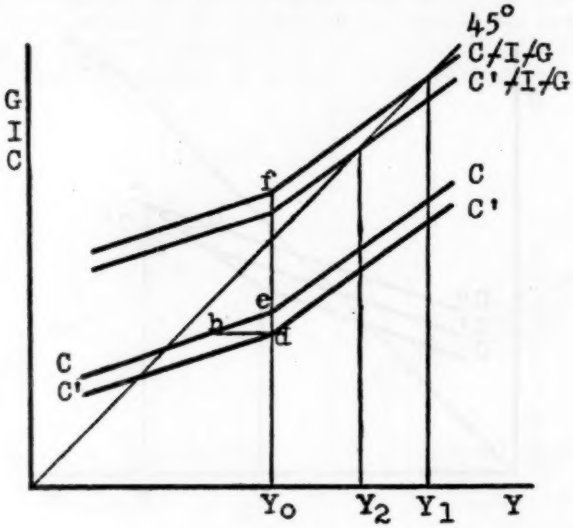

FIGURE 10

To introduce investment (I) and government expenditures (G), let us take the case where a constant inflationary rate of money investment is being maintained (so that there is an equilibrium level of income above full employment; if an inflationary rate of real investment were being maintained, the result would be an ever widening inflationary gap in money terms). In the case of a reversible consumption function above full employment (see Figure 10) the fall in income from Y_1 to Y_2 resulting from new taxes, bd (=T), then is $T \cdot \text{mpc} \cdot \frac{1}{1-\text{mpc}'}$, where mpc is the marginal propensity to consume in real terms, and mpc′ is the marginal propensity to consume in money terms above full employment (mpc′ is equal to the average propensity to consume at and above full employment).

But if the government increases its expenditures at the same time by the amount of the new taxes, income will increase on that acount by

$T \cdot \frac{1}{1 - mpc'}$. The change in money national income resulting from an increase in taxes combined with the same money increase in government expenditures then is:

$$T \cdot \frac{1}{1 - mpc'} - T \cdot mpc \cdot \frac{1}{1 - mpc'} = T(1 - mpc) \frac{1}{1 - mpc'}.$$

Since mpc′ is greater than mpc, the net increase in income resulting from the same increase in both taxes and government expenditures will be greater than the increase in taxes (or government expenditures). If mpc = .5 and mpc′ = .8, the net change in income will be 2½ times the increase in taxes. If mpc = .6 and mpc′ = .9, the net change in income will be 4 times the increase in taxes.

The generally accepted conclusion is that the same increase in taxes and government expenditures will raise income by the amount of the increase in taxes (or government expenditures). This conclusion holds on the assumption of a constant level of prices, and that assumption can be used only for income levels below full employment. The argument can be expressed as above: the expenditures will raise income by $T \cdot \frac{1}{1 - mpc}$, and taxes will lower income by $T \cdot mpc \cdot \frac{1}{1 - mpc}$, so that the change in income is:

$$T \cdot \frac{1}{1 - mpc} - T \cdot mpc \cdot \frac{1}{1 - mpc} = T.$$

The same conclusion might appear to hold for inflationary levels of income if prices were perfectly inflexible in the downward direction. But since the net result is to raise money income, it must be the marginal propensity to consume in money terms which is relevant, for that determines the size of the increase in income. And on either assumption about price flexibility in the downward direction, the net vertical shift in the C + I + G function at the initial level of income is the same, *i.e.*, T(1 − mpc).[18]

The accepted argument on the effects of the same change in taxes and government expenditures involves other important assumptions in addition to the assumption that the level of prices is constant. It assumes that the change in taxes and expenditures does not affect private investment expenditures or the propensity to consume out of any level of disposable income, and that the secondary or "repercussion effects" of increased taxes are the same as

[18] The relationship between the money rate of investment, the level of prices and money national income can be expressed tautologically as follows:

$$(\Delta I + ar)\frac{1}{1\text{-}mpc} = \Delta Y$$

where ΔI is the change in the money rate of investment, a is the intercept of the consumption function (in terms of the initial level of prices) on the vertical axis, r is the percentage change in prices, mpc is the marginal propensity to consume in real terms, and ΔY is the change in money national income.

the secondary or "repercussion effects" of increased government expenditures.[19]

Further assumptions and difficulties are involved when we try to apply this analysis to income levels above full employment. First, if the propensity to consume is in fact constant above full employment, this implies that, given the necessary time for adjustment, neither private investors nor the government can increase real investment over the real savings people choose to make at full employment. They may do so in the short run, but eventually the factors of production will be bid back into the consumption goods industries. This is the essence of Hayek's theory of the downturn in the business cycle. It indicates that the static analysis of the determination of income is not adequate for inflationary levels of income. Moreover, there is an illogicality involved in Figures 5, 6 and 10 where an inflationary rate of real investment is shown. Reverting to the terms of the period analysis (see footnote 7) we should say that the income produced at full employment in Figure 10 is fY_0. But real income produced cannot by definition be greater than full employment income. This difficulty could be overcome by shifting the position of the consumption function during the period of adjustment to a new equilibrium level of income, but presumably the result would be the same as with the ordinary procedure. Finally, using the simplifying assumption that prices are constant below full employment and that above full employment all prices rise proportionally means that we have scarcely gone beyond the "crude" quantity theory of money. If monetary and "real" analysis are to be adequately integrated, the "general" level of prices must be broken down into significant groups of prices which do not change in the same proportion.

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[19] See Arthur Smithies, "Federal Budgeting and Fiscal Policy," in *A Survey of Contemporary Economics*, ed. by H. S. Ellis (Philadelphia, 1948), pp. 187-91.

COMMUNICATIONS

Some Balance of Payments Pitfalls

Most economists and many businessmen have become familiar with the balance of payments series published by various national governments. However, what valid inferences can or cannot be drawn from these statistics are not so generally understood, and the terminology is at times confusing. Most people know that " the balance of payments must always balance," at least in the forms usually published, but not so many understand why or how. The purpose of this paper is to indicate a few balance of payments pitfalls.

The international transactions of governments, firms, and residents (as distinct from citizens) in the United States are recorded in the various accounts of the U.S. Balance of Payments by either plus or minus entries. For example, it has long been customary to record the sale of exports as a "favorable" or plus action, and the purchase of foreign securities as an "unfavorable" or minus action. The algebraic sum of all these recorded transactions should be zero for any given accounting period, whether it be a week or a year, if all the conventions are followed and the data are complete and accurate.[1]

Logically, if export sales are positive and a zero balance is to be approximated, any transfers of funds by foreign importers to American exporters must be viewed as negative. International trade gives rise to two entries in the U.S. Balance of Payments. The act of sale occasions a plus entry in the merchandise trade account and the act of settlement occasions a minus entry in some other account. Whether the foreign buyer accepts a bill of exchange or settles in cash, there is a subtraction from one or other of the subsidiary Short Term Capital accounts of the United States.

A difficulty arises over what to call these plus and minus entries. Some people—the writer included—refer to plus items as Credits and minus items as Debits. However, the Department of Commerce, and hence an increasing number of people, uses the terms Receipts and Payments, respectively. However, this latter terminology is often confusing because many people not unnaturally suppose that Recepits of $x for exports means that U.S. exporters received $x in funds for their exports and that a minus entry of $y on short-term bank holdings means that Americans have paid out $y to foreign residents. Actually, each inference would be quite invalid.

A Receipts entry of $x on account of exports really means that exporters have established, through sales during the accounting period, *claims* to receive $x. Some of this they will have received and some of this they will still be owed. In international trade, partly because of the time needed to ship mer-

[1] In practice, of course, statistical errors and omissions prevent such a perfect balance ever being struck, as is evidenced by the tables that periodically appear in the *Survey of Current Business.*

chandise, settlements lag sales; export statistics usually refer to sales rather than actual receipts, and these differ in magnitude, particularly for any short accounting period such as a quarter year.

A minus entry of $y on U.S. short-term capital bank holdings must appear as a U.S. Payment because of its negative sign. However, this does not mean that U.S. residents have paid out $y to foreign residents during the accounting period. On the contrary, it means that, because *foreign* residents have paid U.S. residents $y during this period, U.S. *claims* to receipts have been diminished by this amount. This revelation usually comes as something of a shock to students who previously imagined that the Department of Commerce uses the term Receipts to mean money received and the term Payments to mean money paid out.

The Receipts and Payments terminology is only valid when it refers respectively to U.S. claims to money and foreign claims to money. Inasmuch as it is *claims* that are under consideration, one might better, it seems, use the ordinary language of double entry bookkeeping and refer to plus items as Credits and minus items as Debits. There is less danger that people will interpret Credits to mean actual receipts and Debits as actual disbursements.

The true nature of the U.S. Balance of Payments is more clearly revealed if one adopts the Credit and Debit terminology. It is then seen to be a list of the claims of U.S. residents against others for payment together with the counter claims to payment of foreign residents. Thus American sales of merchandise, securities, gold, or bank balances all occasion U.S. credits and foreign debits. And any act that reduces U.S. claims to payment, such as when a foreign debtor settles in cash, occasions a U.S. Debit and a foreign Credit.[2]

The objection most frequently raised against the Credits and Debits terminology is that many people are unfamiliar with it. In the writer's opinion this is a merit. It requires people who do not understand their precise meaning to learn them. On the other hand, because most people think they know the meaning of Receipts and Payments, they may incorrectly assume that a negative Money Account indicates the acquisition of American bank balances by foreigners.[3]

[2] Students of international economics often think it strange that long-term investments should occasion debits for the lender, who is now a long-term creditor, because they overlook the fact that it is claims to payments during the *current accounting period* which occasion credits. The prospect of bond redemption, years in the future perhaps, is ignored by today's balance of payments. In the case of short-term lending, covering perhaps only 90 days, a majority of the loans made during a calendar year are repaid within the same year, and hence these transactions are not recorded in the international balance of payments. However, if U.S. residents were to own more foreign bills at the end of a year than at its outset, this would mean, other things equal, that the United States had on balance accepted these foreign bills in lieu of payment, thereby reducing its claim to payment during the period in question, so that this increased bill holding would appear as a U.S. debit.

[3] Actually, the language of ordinary accounting is becoming ever more widespread among businessmen and economists—the kind of people who read the *Survey of Current Business*, for example.

If a credit is a claim on foreign residents for "payment," one might not unnaturally wonder what constitutes "payment." The true answer is that the receipt of anything that occasions a U.S. Debit can be considered an act of payment to American residents. Some people limit the concept of payment received to receipts of U.S. funds from foreign residents. However, if foreigners relinquish foreign funds to American residents, this constitutes a disbursement by other countries, and consequently one would suppose a receipt of payment by the United States. Nowadays, a majority of economists probably suppose that the acquisition of bank balances and legal tender, irrespective of their national denomination, constitutes receipt of payment. On the other hand, in the sixteenth and seventeenth centuries, the merchantilists of those days probably looked upon exports as claims to gold. Actually, there is no reason why economists should not, and perhaps there are several reasons why they should, assess all lending and borrowing, all bank balance shifts, and all gold transfers, in terms of the claims and counter claims to merchandise imports and exports.[4]

The existence of different national currencies in the world is glossed over in the usual national balance of payments. For instance, some U.S. imports from the United Kingdom are bought and invoiced at a contracted dollar price and some perhaps at an agreed-upon sterling price. However, *all* these transactions will be represented as dollar debits in the U.S. balance and as sterling credits in the U.K. balance of payments.

In these days of exchange control the national currency in which different international transactions are denominated may be important. In certain cases it would be helpful, if the requisite data were available, to construct a balance of payments for a nation with multiple debit and credit columns, one for each currency. If this were done for the United States, it would still be true that all sterling debits should logically cancel all sterling credits, and that all French franc debits and credits should offset one another too; but, naturally, one would not expect to find any particular account, such as the bank balances account, to be in exact balance, either for individual currencies or for all currencies collectively.

There is often an unwarranted temptation to draw inferences regarding exchange rate pressures from that part of the Short Term Capital account that concerns American ownership of foreign bank balances and foreign ownership of American bank balances. We shall call this subsidiary account the Money Account. If the Money Account shows that Americans are receiving payment from foreigners—*i.e.*, the account is negative on balance—some people might conclude that the dollar was hardening. This would, however, not necessarily be so. The negative Money Account might arise from the reliquishment of dollar balances by foreigners, or, alternatively, by the acquisition of foreign balances by Americans without foreign exchange ever being sold for dollars. Additional information regarding the debits and credits of specific currency

[4] One means of payment in these days is through intergovernmental gifts. The goods exported under ECA give rise to merchandise credits for the U.S. economy. The offsetting debit is the gift voted by Congress to the foreign nations concerned.

accounts is needed before surmises can be made concerning exchange rate pressure.[5]

Nevertheless, very often there probably is an indirect, uncertain and intangible connection between the Money Account and the hardening or softening of a national currency in the foreign exchange markets. If the money account of a country is negative, that country is becoming more liquid internationally, and other countries are becoming less liquid. The first country is acquiring extra foreign exchange (which it may suddenly dump for its own currency) and/or it is regaining its own currency from foreigners (which lessens their opportunity to dump it and also their ability to sell it in support of their own respective currencies). Shifts in international liquidity may instigate fears for the future, and it is in this indirect way that the state of a nation's money account may weaken or strengthen the foreign valuations of its money.[6]

The balance of payments of a country can be used to ascertain whether that nation is saving and investing *vis a vis* the rest of the world. It is saving internationally if its Current Account is positive and dissaving internationally if it is negative. However, international dissaving may be more than offset by domestic saving—*e.g.*, Canada before 1914—so that the aggregate saving-investment of a national economy cannot be inferred from the state of its Current Account alone.

A nation's balance of payments is not analogous to any familiar accounting statement. It is not a balance sheet, if only because it does not refer to a moment in time but to a period such as a year. It is not an income statement, if only because it does not consider the domestic cost of producing exports or the probable cost of alternatively producing at home those goods which are actually imported. It is not a statement of money actually received and disbursed if only because all export sales are recorded whether sold for cash or on credit. It is a list of claims and counter claims to payment—conceivably in bank balances or legal tender of any currency—established by residents of a given nation during a given accounting period.

STEPHEN ENKE*

[5] Moreover, the existence of considerable exchange rate pressure may never be revealed by the balance of payments. Suppose there is a flight from the Swiss franc to the U.S. dollar which results in the Swiss acquiring dollar balances by selling Swiss francs to the United States at cut-rate prices. The U.S. Money Account is then zero but the dollar has probably appreciated.

[6] These reactions have now of course been described by financial writers for over a century.

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An Uncertainty Theory of Profit[1]

Comment

Elaborating the theory set forth by Professor Frank H. Knight in *Risk, Uncertainty and Profit*, Mr. J. Fred Weston defines pure or economic profit

[1] J. Fred Weston, "A Generalized Uncertainty Theory of Profit," *Am. Econ. Rev.*, Vol. XL, No. 1 (Mar., 1950), pp. 40-60.

as "the difference between *ex ante* and *ex post* incomes" in his recent article (p. 46). Profit, he says, is the "unanticipated residual" and, as such, a nonfactor income. All other incomes, whether contractual or residual, are anticipated and consequently functional incomes or factor incomes, according to Mr. Weston.

Mr. Weston says that important conclusions are to be drawn from his clarification of profit theory. Since profit is merely an *unanticipated* residual, he concludes that firms cannot "maximize profit"; that there cannot be a "profit motive"; and that profit cannot play the determining rôle in the economic system generally attributed to it by economists. He also claims that his clarification of profit theory provides a basis for sound policy proposals.

In the opinion of this commentator, Mr. Weston, far from clarifying the subject, has further obfuscated it.

Net Revenue Returns Not a Factor Income

Mr. Weston explains that firms are not trying to maximize profit, since by his definition profit is an unanticipated income and therefore one which cannot be deliberately pursued. Instead, he tells us, firms endeavor "to achieve *situations* where the revenue-cost relationships for the firm are such that maximum net revenue returns may be achieved" (p. 54).

What are these "net revenue returns" and to whom do they accrue?

If they are not profit, they must be factor incomes. But which factor can claim these returns as a functional income? Surely not the contractually employed factors, since their compensations are fixed in advance. And if some factors are employed on a non-contractual basis, their compensations must be imputed in exactly the same way as if they were contractually employed. These residual income recipients, therefore, cannot claim the net revenue returns as a reward for their factor services any more than the contractual income recipients.

What, then, is the "factor of production" whose "net revenue returns" the firm wants to maximize? There seems to be none. All the factors—land, labor, capital, management, risk-bearing and "ultimate decision-making" get factor incomes which are costs to the firm. But net revenue returns, since they depend on revenue-cost relationships (p. 54), must represent the excess of the firm's revenue over its costs, and consequently cannot be themselves a factor income. They are what is usually called economic profit or pure profit.

"Ultimate Decision-Making" Not a Factor of Production

Mr. Weston regards "ultimate decision-making" as a factor of production. "Decision-making requires the exercise of judgment. . . . Judgment is an economic service. The principles explaining the compensation for this service are similar to the principles explaining the compensation of other services. The payment is a functional return" (p. 48).

A functional return for what? What is the function of *ultimate* decision-

making as contrasted with the decision-making commonly associated with the managerial function?

We may suppose that *ultimate* decisions are decisions to raise prices or lower them, to expand output or to contract it, in order to maximize net revenue returns. This, apparently, is the kind of decision-making Mr. Weston has in mind. In his explanation of the conventional diagram (p. 52) illustrating a firm earning profit, Mr. Weston writes that this so-called profit is actually not profit, but a "factor return which motivates the decision-makers of the firm to carry on productive operations" (p. 53). Decision-makers, then, decide whether production is to be carried on at all and how much shall be produced.

Can such decision-making be regarded as a factor of production? A factor of production is anything that contributes to production, that performs a function in the process of production, that *increases* the output of goods and services. But ultimate decision-makers do not add anything to the output of goods and services. They merely decide how much the factors of production are to be allowed to produce. And they determine how much is to be produced—*i.e.*, they "exercise judgment"—with a view to maximizing the excess of revenue over factor costs. Their function is to maximize non-factor incomes and since they frequently do so by *curtailing* output, not by expanding it, it is hardly appropriate to accord them the designation "factor of production."

The non-factor income pursued by ultimate decision-makers is customarily called profit; and the desire to maximize this non-factor income is customarily called the profit motive. Nothing is "clarified" by renaming profit "net revenue returns," and the profit motive "desire to achieve *situations* where the revenue-cost relationships for the firm are such that maximum net revenue returns may be achieved" (p. 54).

Spurious Distinction between Anticipated and Unanticipated Net Revenue Returns

According to Mr. Weston, profit is the difference between the anticipated and the realized net revenue returns. The anticipated portion of net revenue returns, he says, is not profit, but a factor income.

If the fact that they are anticipated is enough to make net revenue returns a factor income, then this factor income can be increased to any desired level by the simple device of "anticipating" it. And profit could be similarly increased to any level by the simple device of anticipating less of the alleged factor income "net revenue returns." The same income becomes either a factor income or profit, depending on the recipient's state of mind. A change in mood from pessimism to optimism and—hocus pocus—a non-factor income is converted into a factor income.

Again the question must be asked: what is the function performed by the factor claiming this income? Its function, apparently, is to "anticipate" the income; to be optimistic. Pessimism would instantly wipe out his alleged factor income, but nothing else would. Optimism is the only contribution

which this so-called factor makes to production. In other words, it is not a factor of production at all; it adds nothing to production; it performs no function in production; and consequently the income "net revenue returns" can not be a factor income.

The distinction between anticipated and unanticipated residual, between net revenue returns and profit is spurious. They are one and the same, a non-factor income, usually called profit. It is this non-factor income, usually called profit, that ultimate decision-makers are after. And of course this income is uncertain; it is almost always either larger or smaller than anticipated.

Capitalized Returns Not Necessarily Factor Returns

Mr. Weston writes that "if the differential return may be capitalized, it is no longer 'profit,' since it is no longer an uncertain (or unanticipated) differential" (p. 58). In other words, if the differential return can be capitalized, it is a factor income.

This proposition naturally follows from Mr. Weston's definition of profit. If profit is defined as an unanticipated return, it can, of course, not be capitalized. Only expected income can be capitalized. And expected income is, again by Mr. Weston's definition, factor income.

The fact that an income can be capitalized (and hence must be expected) does not, however, make it a factor income. It merely indicates the degree of optimism regarding the size and certainty of the future income. When revenue is expected to exceed factor costs, and to the extent to which it is expected to exceed factor costs, the claimants of the residual non-factor income (whether this income be called net revenue returns or profit) will capitalize it. Such capitalization does not change the fact that the capitalized income is a non-factor income, namely the excess of revenue over factor costs. This net return can be capitalized because it is expected, not because its recipients perform factor services.

Optimism regarding net revenue returns is often a feature of monopoly. The claimants of these residual returns, therefore, capitalize this so-called monopoly profit. Of course Mr. Weston must deny that a monopoly return is profit, because it is anticipated and capitalizable, whereas profit by his definition is unanticipated and not capitalizable. "The monopolist return," Mr. Weston asserts, "is compensation for the performance of a function" (p. 56).

What other function does the monopolist perform than to *restrict* output, so as to have price exceed marginal cost, since this is the situation which according to Mr. Weston defines monopoly? (p. 55) It is a strange concept of a *function* in production which regards deliberate restriction as a function meriting "compensation." Yet this is what Mr. Weston apparently has in mind, for why should he have added parenthetically that this function is "perhaps an undesirable one for the public welfare" (p. 56)?

Actually a monopoly return is not compensation for the performance of

a function in production. It is a non-factor income, the excess of revenue over factor costs. To the extent that it is anticipated, it can be capitalized, but this does not justify calling it a factor income. It is the residual non-factor income usually called profit. And of course this residual non-factor income is almost always either larger or smaller than anticipated—in other words, it is uncertain.

The Residual of Mr. Weston's Theory

What is left of Mr. Weston's "generalized uncertainty theory of profit"? As Mr. Weston himself states in a footnote (p. 41), it is no theory at all because it does not analyze the forces which give rise to profit; it is "a clarification of terminology and concepts."

The "clarification" consists in a defining away of profit until it has all disappeared, leaving only—like the grin of the Cheshire cat—uncertainty. What is ordinarily called profit, namely the excess of revenue over factor costs, is renamed net revenue return and arbitrarily defined as a factor income. The function of the factor claiming this income is either (a) to anticipate its net revenue return, or (b) to maximize its net revenue return, even if this should require the curtailment of output. Under no interpretation can this mythical and mystical factor of production be conceived as having anything to do with producing goods.

Various conclusions, for instance that there can be no profit motive, or that to speak of monopoly profits is a "misuse of terms," are nothing more than applications of the redefinition of profit.

How any of this "clarifies" anything or how "it contributes to a clear conceptual framework for analysis which is necessary to continued progress toward the understanding and solution of basic economic problems" is not "clarified."

Definition and redefinition are of unquestioned importance to science; contradictions between definitions must be eliminated as soon as they become apparent; terms denoting two or more concepts must be modified or changed to avoid confusion. But Mr. Weston's redefinitions have none of these merits. They uncover or expose no contradictions, they clarify no concepts. On the contrary, they add contradiction and confusion to an already confused subject.

Inadequacy of Any Uncertainty Theory of Profit

All is wrong that begins wrong, to reverse a familiar saying. To begin with the notion that the "dependence of profits on uncertainty" is the secure "foundation on which any future theory of profits must rest" (p. 40), is to insure the futility and fallaciousness of all that follows, down to the last sentence, notwithstanding the authority of Mr. Hicks and Professor Knight. An uncertainty theory of profits is no theory of profit at all. It merely elevates to the position of explanation, or rather of definition, one attribute of profit—uncertainty.

What can the uncertainty theory contribute to an understanding of profit? The fact that profit is uncertain? No one doubts that in a private business economy profit must necessarily be uncertain for any individual firm. If this is all the theory can tell us, it is merely propounding the obvious. It calls to mind the story about Till Eulenspiegel, the lovable prankster, convening the tailors of the realm only to tell them that they must have needle and thread in order to sew. The tale adds that the outraged tailors went after Till Eulenspiegel, who had to run for his life.

Or does the uncertainty theory tell us that uncertainty is the *cause* of profit? Of course, if profit is defined as the difference between anticipated and realized returns, one might say the profits are caused by uncertainty, for if the returns were certain, nobody would expect either more or less than the certain return. Only uncertain returns can be uncertain. The proposition boils down to a tautology, not to an explanation.

Need for a Theory of Aggregate Profit

Mr. Weston is undoubtedly right in stating that profit theory is in need of clarification. More than that, it must be made over. Traditional profit theory, as all traditional distribution theory, has an atomistic orientation. It is not concerned with the explanation and analysis of aggregate profit, but with how individual firms get their share of it (unless, of course, it is preoccupied with mere definition and taxonomy). In the competitive struggle for profit, uncertainty looms as a feature of paramount importance to any individual firm. Only from this micro-economic viewpoint can uncertainty have any significance and the explanation of aggregate profit seem unimportant. But this traditional emphasis needs to be reversed. Profit theory must yield to the general trend toward macro-economics. A meaningful theory of profits must answer such questions as:

What are the sources of aggregate profit—or of the non-factor income which is the excess of revenue over factor cost and is commonly called profit?

What are the specific conditions under which all firms taken together can make profits?

What is the relationship between aggregate profit and the size of output produced by the factors of production?

Questions such as these can never be asked, much less answered, by an uncertainty theory of profit.

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Comment

The writer is in hearty accord with Mr. Weston's attempt to formulate a more clear-cut concept of profit. He also views as entirely salutory Mr. Weston's efforts which emphasize the contribution of Professor F. H. Knight to the "theory of profit" and the rôle of uncertainty in economic activity.

It is, however, difficult to accept Mr. Weston's statement that "the theory of profit set forth by Knight in *Risk, Uncertainty, and Profit*" has been "adhered to by him with no major revisions in subsequent writings" (p. 41); especially in view of the remark by Professor Knight that the theory, as developed in *Risk, Uncertainty, and Profit* "needs to be entirely re-worked."[1] Nor do I feel that Mr. Weston's revisions of Professor Knight's theory are the most appropriate. My objections are two-fold: First, Mr. Weston gives the impression of attempting to preserve the notion of distinct distributive shares. Second, uncritical application of the techniques of probability theory to economic uncertainty appears to reduce the content of Professor Knight's theory.

The Notion of Distributive Shares

Mr. Weston views profit as a "distinct type of distributive share" (p. 41), and adds that "sound theoretical basis for distinguishing between wage, interest, rent, and profit components in the incomes of buyers and sellers of economic services exists" (p. 51). Also the term "factor(s) of production" is frequently mentioned (pp. 41, 47, 50, 51, 56). It is not certain if Mr. Weston views the rôle of distribution theory as that of ascertaining how various "homogeneous" groups in society receive, or carve out of the total product, their respective shares. Nowhere does Mr. Weston refer to the factors of production as land, labor, capital, and enterprise or entrepreneurship. However, if he is willing to apply the notion of a "distinct type of distributive share" to one group (entrepreneurs), it is difficult not to infer that the same concept should be extended to other groups. This appears obvious in that Mr. Weston rejects the view (stated by Professor Knight) "that every income, with accidental exceptions, contains an element of profit,"[2] because of the difficulty of utilizing the concept (p. 51). The only difficulty in conceiving of profit as a component in the returns of all productive agents is that such a concept does not lend itself to the notion that income is divided between homogeneous groups of productive factors, of which profit is presumably the component that cannot be classified into the others (p. 56).

The relevance of treating profit as either (1) a distinct type of distributive share, or (2) an unqualified income category is doubtful. The meaningfulness of the notion of distributive shares, and its by-product, factors of production, was questioned by Professor Knight in *Risk, Uncertainty, and Profit*;[3] however, he continued to use the concept and the residual theory of profit was the result. Professor Knight completely rejected the notion of factors of pro-

[1] F. H. Knight, "Professor Hayek and the Theory of Investment," *Econ. Jour.*, Vol. XLV (March, 1935), pp. 79-80, note 1. The substance of this footnote is in Professor Knight's Additional Note for the Reprint of the 1940 issue of *Risk, Uncertainty, and Profit* (London, London School of Economics, Reprints of Scarce Works, No. 16, 1946), pp. xxxvii-xxxix.

[2] F. H. Knight, "Profit," *Encyclopedia of the Social Sciences*, Vol. XII (New York, Macmillan, 1934), p. 482.

[3] *Op. cit.*, pp. 123-27.

duction in his article entitled "A Suggestion for Simplifying the Statement of the General Theory of Price."[4] The notions of "factors of production" and "wages, interest and rent as distributive shares" were hailed as "antiquated lumber" in Professor Knight's Preface to the London School's re-issue of ***Risk, Uncertainty, and Profit*** in 1933.[5] The most explicit treatment of "distribution theory" by Professor Knight is in his excellent article on "The Ricardian Theory of Production and Distribution."[6] The classification of productive agencies along the traditional line of land, labor and capital was emphatically rejected as a carry-over from post-feudal Europe; and the view that distribution is a process by which the total income is divided between the respective classes which were presumably the recipients of the three forms of income—wages, land rent and the return on capital "is undoubtedly the point on which the classical economist 'went wrong'."[7] Distribution theory is only a "corollary or footnote to an exposition of the mechanism by which resources are apportioned among different uses, and organized in each use, under the forces of price competition,"[8] and it "presents no special problem unless the fact of indirect instead of direct demand may be regarded as such."[9] "The notion of a 'factor of production' is an incubus on economic analysis, and should be eliminated from economic analysis" was a statement made in 1938.[10] This view was "softened" by Professor Knight in 1944 in his article entitled "Diminishing Returns from Investment,"[11] wherein he stated that he doubted that "the whole conception of 'factors of production' should be discarded outright," but he went on to add that "if we do use it, the concept of a factor should be carefully defined in abstract terms, as a group of agents interchangeable in production, and it should be recognized that no list of concrete 'factors' can be drawn up. . . ."[12]

Perhaps Mr. Weston is not attempting to rehabilitate the traditional classification of income categories. But it should be pointed out that efforts to view "distribution theory" as anything other than the pricing of production services implies some notion of distinct distributive shares, which in turn implies unique classes of productive agencies, or "factors" of production and internal homogeneity between certain productive agencies. The demise of this concern with distributive shares has had much of its impetus from Professor Knight's works. Although Mr. Weston may feel that this trend should be reversed, it seems somewhat inappropriate that his efforts should

[4] *Journal of Political Economy*, Vol. XXXVI (June, 1928), pp. 367-70.

[5] *Op. cit.*, p. xxv.

[6] *The Canadian Journal of Economics and Political Science*, Vol. I (February and May, 1935), Part I, pp. 3-25, Part II, pp. 171-96.

[7] *Ibid.*, p. 22.

[8] *Ibid.*, p. 171.

[9] *Ibid.*, p. 172.

[10] "On the Theory of Capital: In Reply to Mr. Kaldor," *Econometrica*, Vol. 6 (Jan., 1938), p. 81.

[11] *Journal of Political Economy*, Vol. LII (March, 1944), pp. 26-47.

[12] *Ibid.*, p. 33, note 7.

be presented as an interpretation of Professor Knight's views.[13]

The classification of productive agents about which Mr. Weston is most explicit is that of "hired" and "unhired" factors. Non-contractual income receivers, or "unhired" factors are those who bear uncertainty and are thus the recipients of profit (p. 47). Hired factors receive contractual returns, that is they are paid current prices, which are determined on the market, for the services of that which they own. Under perfect competition, the return to a productive agent, whether it be hired or unhired, would be identical. However, because perfect foresight does not exist, someone bears the responsibility of producing for a future market. That is, someone undertakes the function of being a residual income receiver with respect to any particular venture.

Mr. Weston's analysis is correct as long as we confine our attention to a particular venture. Profit and loss, with respect to a particular venture, must fall to the owners of the "unhired factors." However, since we are attempting to obtain some picture of profits in an aggregate sense, it is necessary to elaborate upon his treatment.

At any point in time, individuals are selling the services of the agents they own (including themselves) to those in charge of business ventures at contractual rates of remuneration as they are established on the market. These services, through a process of production, are transformed into other services which are to be utilized for consumption or further investment *via the intermediary of capital goods or investments.* Thus, any productive process involves investment, productive services available now are converted into services available in the future. It is through this investment activity that time and uncertainty enter into the economizing process and, "it is by way of the capital account that uncertainty enters into the rational management of production, and in changes in capital the special problem of profit lies."[14]

Therefore, strictly speaking, all economic subjects bear uncertainty. Although the hired factors do not bear uncertainty with respect to the venture in which they currently may be engaged, they may obtain profit, or suffer

[13] This is not to say that it is not of value to classify the various contractual forms that are utilized to effect transfers of money payments between individuals. But it should be emphasized that this is not a theoretical problem. Indeed, much of the difficulty encountered in the "theory of income distribution" arises because of attempts to classify as income, *i.e.*, payment for a productive service, what is actually a transfer payment, *e.g.*, interest and dividends. Mr. Weston is also guilty of this. On page 56 of his article, he refers to interest as a component in the income of sellers of economic services. Interest is merely a transfer payment. Both parties to a loan contract own the asset which is purchased by the proceeds of the loan; and the payment of interest is only one means whereby the co-owners distribute part of the earnings of the asset. *Cf.* Earl R. Rolph, "The Concept of Transfers in National Income Estimates," *Quart. Jour. Econ.*, Vol. 62 (May, 1948), pp. 332-44.

[14] *Risk, Uncertainty, and Profit,* p. xxxviii. *Cf.* also, Professor Hayek and the Theory of Investment," *op. cit.*, p. 80, note 1. "The *crucial* element in the profit problem in a society in which capital is employed has to do with asset values. . . . Time and uncertainty enter into profit . . . through the capital account, or specifically, through inventories and depreciation" (italics in the original).

loss, if future contractual rates of remuneration turn out to be different from what was anticipated. The fact that the owners of certain productive agencies cannot capitalize these newly anticipated income streams (*e. g.*, labor, or any source of income which cannot be alienated) is an institutional factor rather than a theoretical one.[15] This is not merely a long-run phenomenon. Profits, in this sense the changes in capital values, occur as anticipations are revised, and such anticipations are revised continually.

This raises another difficult problem. If "profit in the theoretical sense (including loss) is largely a matter of changes in the value of assets, not a difference between current income and outgo . . .,"[16] in what sense can we view it as an income category? The source of profit and loss is change; and, more specifically, change which is imperfectly anticipated by economic subjects with varying degrees of imperfection between themselves. Those who anticipated a given change more correctly than others receive capital gains; others, whose anticipations were less correct (or wrong) suffer capital losses. As Hayek has pointed out, there is no reason why the gains and losses should cancel out, and in general, the process gives rise to a redistribution of the capital stock (in the value sense) of the society—a process quite distinct from that of the distribution of income itself.[17] Nor can we measure or identify profit by observing changes in the value of the capital stock because such changes are also a function of the saving and investment process. It is an open question if profit, in the Knightian sense, is an unqualified income category at all; consequently, the attempt to treat it as a "distributive share" is questionable.

The Nature of Expectations

Mr. Weston (p. 46) defines profit as the difference between *ex ante* and *ex post* incomes of the unhired factors. Uncertainty exists because of unpredictable changes in supply and demand functions (p. 49). Attempts are made to predict these unpredictable changes and the process is rationalized by the use of the frequency distribution technique (pp. 42-43, 49). In fact, uncertainty is defined as a situation where "the dispersion of the probability distribution of the likelihood of the future event is not zero . . ." (p.43). [18] Now this raises the question whether uncertainty is being discussed at all. Professor Knight, in his discussion of risk and uncertainty, states that a "third species" of probability must be recognized apart from *a priori* and statistical probability because "there is *no valid basis of any kind for classifying instances*."[19] This distinction arises because of the uniqueness of the typical business

[15] *Cf.* Knight, "The Ricardian Theory of Production and Distribution," p. 20.

[16] F. H. Knight, "The Quantity of Capital and the Rate of Interest," *Jour. Pol. Econ.*, Vol. XLIV (Aug., 1936), Part I, p. 463.

[17] F. A. V. Hayek, "The Maintenance of Capital," *Economica*, Vol. II, new series, (Aug., 1935), pp. 267-68.

[18] This seems to be another way of saying that where one cannot be dogmatic, uncertainty exists.

[19] *Risk, Uncertainty, and Profit*, p. 225. (Italics in the original)

venture which gives rise to profit. This necessitates a two-fold estimate: (1) an estimate of the probability with respect to the outcome of the venture, and (2) another probability estimate of the "correctness" of the first estimate.[20] This is virtually equivalent to saying that the techniques of mathematical probability theory have no application to the unique business venture.

However, it may still be permissible to use the techniques of probability theory, in order to rationalize behavior in this context, provided proper safeguards are taken. Unless such precautions are taken, the nature of uncertainty, in the Knightian sense, is assumed away.

Because a business decision is made under circumstances that are not part of a homogeneous universe, it is more meaningful to state that the modal value (most probable) of the frequency distribution is the proper *ex ante* magnitude upon which the businessman focuses his attention.[21] This, however, is not the end of the matter. Two other elements enter into the decision-making process. They are: (1) "the participants' confidence in the probability forecast under consideration," and (2) "the participants' attitude toward the 'uncertainty' resulting from the uniqueness of the instance . . ., and from the possibility that an improbable outcome might materialize in this single instance."[22] This is another way of saying that, in setting up a "pseudo" frequency distribution, the participant realizes that he may be "wrong" in his estimate. Within this schema, what is the nature of the *ex ante* returns of which Mr. Weston speaks? Presumably it would be any return which would deviate from the expected modal value of the frequency distribution. However, it should be added that should the outcome deviate from this modal value, the "profits" are not entirely unanticipated because the participant has taken precautions to meet some of these contingencies.

This does not mean to say that the frequency distribution technique is the most appropriate one for dealing with uncertainty. We merely have adopted an approach suggested by Professor Fellner which "rescues" the concept for purposes of discussion. A more fruitful method for treating uncertainty appears to be that presented by G. L. S. Shackle.[23] Shackle explicitly rejects the probability approach because: (1) the law of "large numbers" has no relevance with respect to the unique venture,[24] and (2) the technique is positively misleading when used to rationalize behavior in this context.[25]

Shackle's alternative is the concept of "potential surprise." The participant envisages any number of alternative outcomes as the possible result of the particular venture. The occurrence of any one of these outcomes is not only as "probable" as any other, but would give rise to no "surprise" if any one

[20] *Ibid.*, pp. 226-27.

[21] William J. Fellner, *Monetary Policies and Full Employment* (Berkeley, University of California Press, 1947), p. 154.

[22] *Ibid.*

[23] *Cf.* his *Expectation in Economics* (Cambridge, Cambridge University Press, 1949).

[24] *Ibid.*, p. 7.

[25] *Ibid.*, pp. 112-14.

of them should occur. Of all these hypotheses carrying no "potential surprise," it is the extremes of this inner range upon which the enterpriser concentrates his attention.[26] The typical investor's vista is, however, extended beyond this range in order to give free play to the imagination and the desire to "act," and consequently he focuses his attention upon outcomes which would occasion surprise if they should occur.[27]

Within this schema, profit, in the sense of representing the difference between *ex ante* and *ex post* returns would be extremely indeterminate. Their magnitude would be a function of the individual's subjective state and would vary between individuals in relation to the range that each would personally view as not being capable of creating surprise. Even if it is held that any gain which does create surprise would be profit, it could not be said that "profit maximization" plays no allocating rôle or motivating force in a price economy (*cf.* Weston, pp. 57-59). In fact it seems more reasonable to state that the prospect for gains, themselves extremely unlikely, and which can only exist in a world of uncertainty, plays a major rôle in the actions of individuals.

To treat uncertainty and anticipations in terms of the orthodox frequency distribution approach is equivalent to ignoring the problems that are raised when the "perfect foresight" assumption is dropped. If uncertainty is accounted for by the use of a "decomposed" form of the frequency distribution technique, or if Shackle's concept is adopted, the definition of profit as the difference between *ex ante* and *ex post* returns has little meaning.

J. A. Stockfisch*

[26] *Ibid.*, p. 4.

[27] *Ibid.*, p. 5.

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Rejoinder

I

The issues raised are discussed in the sequence presented by Professor Murad to reduce the need for restating his observations.

The nature of net revenue returns. In this section of his discussion, Professor Murad has suggested some penetrating questions. "What are net revenue returns and to whom do they accrue?" Net revenue returns are returns which are usually called "profit," and are received by the non-contractual (residual) income receivers. This type of return should not be called profit because it represents compensation for service contributions. The conventional diagrams of partial equilibrium analysis are *ex ante* constructs. Anticipated net receipts (*pedv* in Fig. 1, p. 52, original paper) represent the expected incomes to factors who are remunerated on a non-contractual basis. There is no valid basis for attaching a special name to anticipated income of non-contractual income receivers since their income represents compensation for services of the same types as those performed by contractual income receivers (*cf.* pp.

46-47). The economic rôle of anticipated receipts to non-contractual factors, precisely the same as the rôle of anticipated receipts of contractual factors, is to guide allocation of these resources. The net receipts actually realized, *ex post*, may be larger or smaller than anticipated. The difference between *ex ante* returns and *ex post* returns is called profit since it does not represent payment for services, arises from errors of prediction, is not anticipated and affects motivations only to the extent that experience is provided for formulating subsequent expectations.[1]

Professor Murad objects that the residual income recipients should not receive the net revenue returns because "their compensations must be imputed in exactly the same way as if they were contractually employed." But this ignores the rôle of uncertainty. Because the (uncertain) future is viewed differently by factor owners, a multiplicity of contractual arrangements is developed and different contractual positions are taken, reflecting differing expectations. While the portion of the remuneration of non-contractual income receivers representing their opportunity cost may be imputed as cost, they also receive the remainder because of the kind of contractual position they have taken.

Ultimate decision-making. Ultimate decision-making may best be regarded as the function of dealing with uncertainty. Professor Murad's interpretation is too restrictive. However, decision-making narrowly defined as choosing price and output with assumed known revenue and cost conditions would still represent an economic function. Professor Murad's error arises from defining production in physical terms instead of value terms. He states that if a recommendation is made to reduce output, there has been no economic contribution, since the quantity of physical output is reduced. But presumably there would be if the recommendation was to increase output, even if this resulted in decreased net receipts (long run)!

The economic significance of anticipations. Profit is a function of anticipations and can be altered by a "change in mood." True, but not by "hocus pocus." Anticipations are significant as they are reflected in and expressed in supply and demand functions. This is the mechanism through which a change in expectations results in a change in economic activity with consequent changes in the pattern of prices, returns, and profits. Similarly, a "change in mood from pessimism to optimism" in connection with decisions to invest may raise the level of national employment and income.

Capitalization and factor returns. A factor return is not defined by its capitalizability. A factor return is compensation for economic services, *i.e., contribution to value product.*

[1] The criticism has been expressed to me by others that under certainty net receipts would not exist even in the short run. Since net receipts and unanticipated deviations (my concept of profit) both arise from uncertainty, it is urged that what I label as profit is simply one (the relatively less important) form of profit. Although net receipts arise because of uncertainty, in the conventional diagrams net receipts are represented as definite as other revenue and cost elements. And since it represents compensation for the same types of services as the payments included in cost curves, it is best regarded as a conglomerate income category rather than a distinct type of income, profit.

Professor Murad's comments on monopoly revenues stem from confusion on the essence of monopoly which is not the *act* of having a price and output determined by equating marginal revenues and marginal costs, but rather is the *attainment of a situation* in which such a policy may effectively be pursued.

The Uncertainty Theory of Profit. My discussion here combines the material of his next two sections. Professor Murad summarizes the uncertainty theory into the propositions that profit is uncertain or that uncertain returns are uncertain, suggesting that the former is obvious and the latter tautological. These are inaccurate oversimplifications. *Because* anticipated returns under uncertainty differ from actual returns, the amount of profit cannot be estimated and hence cannot have a major motivational influence (see pp. 46-51 for a more complete statement).

But more important is the influence of uncertainty on business strategy formation, forms of contractual relationships, and the supply of willingness to bear risk (*cf. Risk, Uncertainty and Profit,* pp. 233-75). Professor Murad seems to have missed the significance of uncertainty for decision-making.

The uncertainty theory does not provide a new apparatus for direct application in analysis. Its positive contribution is its explanation of the source and nature of a distinct component in factor returns (p. 42). It is consistent with the main body of economic theory into which it is integrated. It is a theory of profit despite the misquotation of the first line in footnote 5 (p. 41) of the original paper.

A major service of the uncertainty theory is that it guides analysis away from the directions indicated by alternative theories of profit, which because they are not consistent with basic economic principles lead in paths ending in ambiguity or error. (These assertions are supported by pages 52-56). For example, Professor Murad's variant appears to ascribe profit to the pathological condition in which unneeded and unwanted exploiters formulate price and output policy for firms and seek to maximize accounting "profit," all of which is retained by them. Apparently, he adopts the accounting definition of net income as profit and regards all of the income of non-contractural factors as "non-factor" returns.

An aggregate theory of profit. Professor Murad's suggestions for a theory of aggregate profit proceed from the view that there is need for the micro-economic viewpoint to "yield to the general trend toward macro-economics." But is not the need rather to integrate the two and to make the principles formulated in one consistent with the other?

The meaningfulness of questions posed for a theory of aggregate profit depends, of course, upon the "correctness" of the formulation of the profit concept. The questions set out by Professor Murad seem to be oriented to accounting measures of "profit." This may stem from the present practice of calling the aggregates of corporate net incomes, "corporate profits," in national income statistics. Since the category contains a conglomerate of types of factor returns, but mainly an interest return, it is mislabeled by economists, "profit." Here is a place for improvement in terminology at the aggregate level. Professor Murad's and other useful questions might be explored in the attempt

to add to the valuable research of Professor Crum and others, on the rôle of corporate net incomes in the economy; such studies provide only indirect information on aggregate profit, however. Further, since profit, positive or negative, in the returns to some is at least partially matched by profit of the opposite sign in the returns to others, aggregate profit at least partially cancels out.

Questions posed by the uncertainty theory of profit may be briefly indicated. (1) What are the consequences of general over-optimism or over-pessimism of non-contractural income receivers and decision-makers for income distribution and the level of output and employment? (2) What is the influence of wars, preparedness programs, welfare programs, etc., which cause large and not completely foreseen shifts in income distribution upon anticipations and incentives? (3) What is the impact of other public policies upon the desire or willingness to bear uncertainty? (4) What effects do shifts in power between different socio-economic groups have upon the nature and forms of contractural relationships and the distribution of preferences for the different types? (5) What is the influence of the variability of returns (a measure of uncertainty) in alternative lines of economic activity on the flow of resources and what are the consequent effects of different patterns of resource allocation upon the level of employment and output? These are the kinds of questions, which include the macro-economic viewpoint, to which analysis is directed by the uncertainty theory of profit.

II

The comment of Mr. Stockfisch clarifies some major points and gives additional emphasis to concepts only briefly treated in my paper. This discussion is directed mainly to areas requiring further clarification.

1. He states that Knight's theory of profit as set forth in *Risk, Uncertainty, and Profit* has been substantially changed in subsequent writings. Although Mr. Stockfisch presents evidence of some reorientation of Knight's views, the summary of profit theory set forth by Knight in his 1942 paper on "Profit and Entrepreneurial Functions," supports my interpretation and is later than any of the citations marshalled by Mr. Stockfisch. However, the rôle of asset value changes in profit theory (the line of modification adverted to by Knight) may deserve greater emphasis and elaboration than it has hitherto received.

2. Mr. Stockfisch feels that my paper gave the impression of attempting to preserve the idea of distinct distributive factors and associated returns. Actually, my position on profit theory is neutral toward classification of payments for productive services. My formulation used the traditional language to center attention on my concept of profit in the attempt to avoid controversy on other issues. My discussion holds, in this connection, that profit is a form of income arising from circumstances sufficiently distinct to suggest that it be regarded as a unique income category.

My paper did not "reject" the view that every income may contain an element of profit. My discussion (p. 51) was not clear since it was also attempting to indicate "how much" profit was contained in returns to productive

agents. The difference between returns under uncertainty and returns under certainty was suggested as a measure of profit in the returns to productive agents. Neither the ubiquity of profit nor the measure was "rejected." The measure was held to be difficult to utilize and not appropriate for use in the analysis of the traditional treatment of "profit" in the short run under pure competition which followed.

3. The distinction set forth in his footnote 13 and the error attributed to my discussion are based on a misunderstanding of the propositions in the article he cites. The distinction Mr. Stockfisch draws is between (1) income and (2) transfer payments. This is invalid. The source cited draws the distinction between two forms of *income*: (1) nontransfer payments (income which represents payment for productive services, *i.e.*, increases the total of net value product) versus (2) transfer payments (income which represents payment for services that are not productive, *i.e.*, do not increase the total of net value product).[2]

4. He suggests that the probability distribution technique is not appropriate for dealing with uncertainty. Some of the disagreement here arises from the omission in the discussion of Mr. Stockfisch of the distinctions drawn in my section on "transformable versus measurable uncertainty" (pp. 43-44) and the failure in my discussion on pp. 49-50 to make clear that the analysis there dealt with consequences of "nontransformable uncertainty." It is valid to observe that the influence of nontransformable uncertainty may not appropriately be handled simply by use of stochastic variables. However, the difficult problems involved are not satisfactorily dealt with by Shackle's "potential surprise" approach. As a part of the explanation of this approach, it is stated that "it is upon the extremes of this inner range upon which the enterpriser concentrates his attention." This implies that the probabilities of alternative outcomes are expressed as ordinal relationships, and implicitly involves a probability distribution. As Fellner has indicated,[3] while it is a fiction to convert (nontransformable) uncertainties to certainty equivalents, the procedure is virtually unavoidable in order to utilize a manageable analytical framework. Traditional economic analysis, of course, depends heavily upon implicit conversion to certainty equivalents.

Not that analysis may proceed from nontransformable uncertainty to subjective probability distributions and thence to certainty equivalents. The significant point here is that the existence of nontransformable uncertainty alters the kinds of strategies adopted by decision-makers. The major emphasis of profit theory is that decision-making under uncertainty differs *in kind* from decision-making under certainty.[4] In the face of uncertainty, decision-makers develop hedge operations of many types, *e.g.*, greater liquidity, multiple

[2] E. R. Rolph, "The Concept of Transfers in National Income Estimates," *Quart. Jour. Econ.*, Vol. LXII (May, 1948), p. 356 and associated discussion.

[3] W. J. Fellner, *Monetary Policies and Full Employment* (Berkeley, University of California Press, 1947) pp. 152-66; *Cf.* also L. Hurwicz, "Theory of the Firm and of Investment" *Econometrica*, Vol. XIV (April, 1946), esp. pp. 133-34.

[4] I am indebted to Mr. Frank E. Norton for clarifying discussion on these points.

products, multiple plants, multiple selling outlets, advertising expenses, greater flexibility in equipment, reduced fixity of operating charges. If certainty equivalents are formulated via subjective probability distributions for the strategies *cum* hedges, the consequent violence to the reality of the decision-making process (to the extent that we know about it) is admissible. When certainty equivalents are adopted, it is meaningful to deal with *ex ante* returns.

5. In connection with the preceding point, Mr. Stockfisch's statement that "the prospect for gains, themselves extremely unlikely . . . plays a major rôle in the actions of individuals," depends upon a probability distribution approach. "Extremely unlikely" means having some (low) probability of occurrence, high enough to have a motivational influence. It signifies that those possible returns are reflected in the parameters of the subjective probability distribution. But even, if in addition to the mode (or mean) of the subjective probability distribution, other parameters—*i.e.*, dispersion and skewness—are taken into account, there still exists a certainty equivalent. This does not deny that nontransformable uncertainties influence decisions, but that their influence, as expressed in the conventional diagrams of partial equilibrium analysis, is reflected in certainty equivalents which represent *ex ante* returns.

Mr. Stockfisch observes, in connection with his exposition on profit as changes in capital values, "those who anticipated a given change more correctly than others receive capital gains." But since capital values are the present worth of *anticipated* returns, correct anticipations are already reflected in (subjectively determined) capital values. A more accurate statement is that "imperfectly anticipated" change may have either a favorable or unfavorable impact.

6. The relationship between profit and capital value changes deserves additional discussion. Mr. Stockfisch states, "Profits, in this sense the changes in capital values, occur as anticipations are revised, and such anticipations are revised continually." Whereas in his comments on "The Nature of Expectations," my formulation is said to be defective because *ex ante* returns are said to be indeterminate, at this place his emphasis is on the continuous revision of determinate *ex ante* returns as measures of capital value changes (or profits).

Here he defines profit, following brief hints dropped by Knight, as the difference between successive *ex ante* long-run returns. This formulation is consistent with my definition of profit if in successive couplets of *ex ante* returns, one of the two returns is considered an *ex post* return.

Expressing profit in terms of capital value changes has merit but also presents difficulties. On the favorable side, it views every owner of sources of services as an economic unit, seeking to maximize the present worth of the stream of income which may be expected to be derived from his service potential. It emphasizes the generality of the profit component in incomes because of the omnipresence of capital (*e.g.*, training, experience). It makes clear that all economic agents bear uncertainty. It further emphasizes the invalidity of conventional representations of "profit" since the continuous

asset value revisions envisaged would result in the inclusion of all rents in the average cost curves and hence under pure competition price would always equal average costs.

On the other hand, all incomes are viewed as streams in an extremely elongated time dimension and all anticipated streams of income are expressed as capital values. The concepts are difficult to express by easily managed apparatus. It raises the question of how the appropriate period for revision of anticipations is determined. The measurement and indentification problems become even more baffling.

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Mises' "Human Action": Comment

In the June, 1950, issue of this *Review,* Mr. G. J. Schuller, in his review of Ludwig von Mises' *Human Action,*[1] makes various criticisms of the book which deserve reply.

1. Schuller claims that Mises asserts a "law of social development whereby the majority in the long run . . . chooses the system which provides the higher standards of living." Mises makes no such absurd claim. What he does say is that the majority of a people choose that form of government which *they believe* will provide them with highest standards of living. This is simply saying that all exercise of power rests on the consent to obey by most of the inhabitants.

2. Schuller maintains that Mises "provides no clear test of incorrect versus 'correct praxeological reasoning.'" The tests are, on the contrary, clear enough. Praxeology consists of two main elements: (1) the fundamental axioms, and (2) the propositions successively deduced from these axioms. Neither the axioms nor the deduced propositions can be "tested" or verified by appeal to historical fact. However, although the axioms are *a priori* to history, they are *a posteriori* to the universal observations of the logical structure of the human mind and human action. The axioms are therefore open to the test of observation in the sense that, once postulated, they are universally recognized as true. Such recognition may be accused of being "introspective," but it is nonetheless scientific, since it is an introspection that can command the agreement of all. The deductive propositions are tested according to the universally accepted laws of logic. (Laws, incidentally, which are also *a priori* to historical fact.) The fact that a proposition comes at the end of a "long chain of deduction" makes it no less valid than a proposition at the end of a short chain.

3. It is curious that an economist who is convinced of the truth of economics should be accused of "uncompromising dogmatism." An attitude of frank conviction is a refreshing change from the timidity and apolegetics that are all too frequent among economists. Schuller wonders how Mises can unabash-

[1] *American Economic Review,* Vol. XL, No. 3 (June, 1950), pp. 418-22.

edly criticize the logic of such eminent predecessors as Ricardo and Menger. He forgets, as Mises does not, that Mises is building on a great structure of economic thought to a large extent developed by these men. Coming later, he is in a position to refine the structure as well as to add new developments of his own.

4. There is no conflict between an historical and a praxeological statement when Mises says that the gold standard is an historical fact and that this standard was responsible for increasing welfare, liberty, etc. "Money" is a praxeological category, arising when the market chooses a commodity to serve as a general medium of exchange. Such choice of a money leads to enormous economic benefits, as is demonstrated by praxeology. Furthermore, governmental interference with the functioning of this money leads to consequences, according to Mises, universally recognized as undesirable. This, too, is a praxeological statement. But that the commodity *gold* happened to be chosen by the market is in the category of an historical fact.

5. Schuller's next criticism is a dual one, with one part contradicting the other. He asserts (1) that Mises fails "to bridge" the dualism between *a priori* praxeology and *a posteriori* history, and (2) that Mises succeeds in so doing for the free market but not for other types of markets. Schuller maintains that in order to forge this bridge, Mises would have to furnish "positive theorems covering all types of historical situations" and "instructions for determining when the conditions of a particular situation coincide with those assumed by a particular theorem." Such stipulations are absurd, and can never be fulfilled by any theorist. It is precisely the task of the historian to attempt to explain historical situations by the use of praxeological theorems, to uncover their complex interactions in the actual historical situation. But even at best, such historical work is tentative and inexact, relying to a large extent on judgments of relevance and emphasis by the historian. It is vain to search for magic formulas to provide simple explanations for all historical events, and the knowledge that such attempts are vain accounts for Mises' "failure" to provide the "bridge."

Schuller's contention that Mises confines his praxeological theories to the free market alone is clearly erroneous. Mises first develops the praxeological laws of the free, or unhampered, market. He then analyzes the effects of each different type of government intervention in the market. Part Six is wholly devoted to this analysis. In Part Five he analyzes the consequences of a totally socialist economy, where the free market in factors of production is abolished. So Mises, far from giving us a "single standard . . . the color white alone," analyzes all the different types of situations, white, black and all shades of gray.

When Mises, on page 854, implies, in Schuller's terminology, an unilinear relationship between departures from the free market and departures in consequences, he is not simply making an offhand assumption. He is summarizing the results of the analysis of Parts Five and Six, an analysis which Schuller seems to ignore completely. His standard does not become normative. As an economist, Mises is value-free. But, if the demonstrated results of intervention and socialism are such as to lead to consequences which everyone will con-

sider undesirable, then Mises as a citizen certainly has a right to agree that they are undesirable.

6. Schuller then cites various instances of what he calls arbitrary applications of catallactic principles to historical reality. In most of the cases, however, he cites not applications, but the principles themselves.

a. Mises is not being arbitrary in stressing monopoly and competitive prices rather than a special type of "monopolistic competitive" price. This is a result of trenchant criticisms of the monopolistic competition analysis. Mises also discusses cases of incomplete monopoly, duopoly, oligopoly, cartels, price discrimination, and monopsony, and furnishes new insights on all of these problems.

b. Schuller contends that Mises' theory of business cycles assumes full employment at the beginning of the interventionary credit expansion, and "is not concerned with the effectiveness of the same policy under large-scale unemployment." This charge is completely false; Mises specifically deals with this problem on pages 576-78. He there demonstrates that his business cycle theory is fully applicable to conditions of large-scale unemployment of factors of production.

c. Mises does not have to explain how systems other than the pure market have managed to survive historically. Merely to survive, regardless of the level of existence, does not require more than the rudiments of the free market, more than a little white in the gray picture. Whatever economic success other systems have had was due to those elements of the market that were permitted to exist.

d. It is difficult to understand what Schuller means here. Mises does not offer any "stagnation" thesis. If Schuller means empirical illustration of the unfortunate consequences of government intervention, such evidences abound. One has only to point to the condition of present-day England, or observe the various "dollar gaps" to mention just some of the countless possible illustrations.

e. Here is a point which especially seems to worry Schuller—the contrast between man's economic rationality on the market, and his irrationality in the political sphere. Mises is not contradicting himself here, but asserting an important truth about human behavior. It is a truth that is not difficult to explain. When an individual chooses purchases on the market, either as consumer or as entrepreneur, he has certain definite guides for selection. The consumer knows the prices of the various goods, and he can test the quality by selection. If he buys what is labelled "breakfast cereal" and it turns out to be a package of hay, he knows it soon enough, and that firm soon finds itself out of business. The consumer is in a position to arrange a set of preferences according to his tastes, to evaluate the products open to him. But, in the political sphere, the reverse is true. The consequences of different sets of political measures can only be understood by the ability to grasp complex chains of abstract praxeological reasoning. The vast majority of the voting public do not have this ability. There is no empirical test that will demonstrate one type of governmental measure valid as opposed to another type. Consequently, the voter turns to whichever political leaders state their case

with the greatest propaganda ability, *i.e.*, to demagogues. Thus, suppose that the government inflates the money and credit supply and prices rise. One party can point out the cause and call for a cessation of the governmental inflation. The other party can assert that the inflation is caused by wicked speculators and profiteers and that inflation of the currency has no effect on prices. The voting public has no rational way to choose except by exerting powers of reasoning which they do not possess.[2]

Governors appointed by popular vote are Führers, while corporation directors are mandatories of the stockholders. This is no contradiction either. The corporation director is completely at the mercy of the stockholders. The head of the state, however, exercises, to a greater or lesser degree, coercive powers over the people. To the extent he exercises coercive power he is a dictator rather than a mandatory. The "electoral mandate" is rather a choice between two sets of aspirants to such a dictatorship.

7. Schuller reads into Mises the truly absurd statement that *all* intelligent choice of means requires calculability. He then asks how Mises can intelligently choose between market economy and socialism. Mises never, explicitly or implicitly, claims that *all* intelligent choice requires calculability. Obviously, the consumer does not have to calculate in order to decide whether he prefers to read *Hamlet* or a detective story the next evening. Calculability is only a requisite in the choice of *means of production* in a complex economy. It is not required for any other judgments of value or for Crusoe-type choice of means in a simple economy. Certainly, Mises offers no basis for Schuller's charge. Indeed, in his essay, "Economic Calculation in the Socialist Commonwealth," Mises explicitly states the conditions under which calculation is required for intelligent choice.[3]

8. When Mises presents us with the choice between the free market and socialism, he is saying that in-between systems of a hampered market are not coherent, consistent systems. He demonstrates that any measure of government intervention in the market creates problems and consequences which present the people with a further choice: repeal this measure, or effect another measure of governmental intervention. Thus, if we may use the term in this sphere, we may say that an interventionist society is always unstable and in "disequilibrium," while the only societies in "equilibrium" are the free market or socialism, since interventionist measures logically lead to one or the other. Since a socialist system cannot exist, the only intelligent choice is the purely free market.

9. Since Mises demonstrates that every form of government intervention in the market creates consequences that lead to an economy worse than that of the free market, Schuller cannot distinguish between rational and irrational forms of government intervention, or designate market intervention as a "technology." For Mises, all government intervention in the market is irrational and therefore contrary to economic law.

[2] *Cf.* the excellent discussion by the late Professor Schumpeter in *Capitalism, Socialism and Democracy*, pp. 256-64.

[3] *Cf.* Mises, in *Collectivist Economic Planning*, ed. by Hayek, pp. 95-110.

Mises, incidentally, does not advocate "inaction," as Schuller maintains. He advocates the confining of the action of government—which is merely the social apparatus of coercion—to the sphere of its competence: the defense of the citizen against violent invasion of his person and property.

10. The book is not too long and repetitious; if anything, it is too short and condensed, and could well have been expanded to the size of a two-volume work. Nine hundred pages are certainly not too long for a book which Schuller admits is one of the first general treatises on economics to appear in a very long time.

11. The term "uneasiness," contrary to Schuller, is the traditional term, rather than "dissatisfaction." "Uneasiness" goes back to John Locke.

12. Schuller's assertion that the index to *Human Action* is too short is absolutely unexceptionable.

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Rejoinder

In the interest of efficiency in this discussion, I hope Mr. Rothbard's thorough analysis meets with Professor Mises' approval, particularly in matters of interpretation.

1. Both the voluntarist and meliorist positions may be found in Mises. On the former: "Only if men are such that they will finally espouse policies reasonable and likely to attain the ultimate ends aimed at, will civilization improve. . . . Whether or not this condition is given, only the unknown future can reveal" (p. 193). On the latter: "Human society. . . . is the outcome of a purposeful utilization of a universal law determining cosmic becoming, *viz.*, the higher productivity of the division of labor" (p. 145). "The chiliastic empires of dictators are doomed to failure; they have never lasted longer than a few years. We have just witnessed the breakdown of several of such 'millennial' orders. Those remaining will hardly fare better" (p. 153). The two strains are rooted in Mises' praxeological axioms. After postulating a common human striving for abundance (p. 19), he tells us that "reason [is] man's most characteristic feature" (p. 176) but that "man very often errs in selecting and applying means" (p. 20).

The ancient problem in the social disciplines of uniting science and policy is not solved by Mises' question whether "characteristically reasonable men" (p. 176) "will finally espouse reasonable policies" (p. 193). In my review I asked whether Mises would try to reconcile this dilemma by regarding his law of development as a praxeological law, effective only so long as its assumption of rational action obtains, while regarding the specific future outcome as dependent also on historical accidents (perhaps including knowledge) which may abort the inner tendencies and therefore make apodictic prediction impossible. Rothbard would reconcile the dilemma by his profound observation that men will choose whatever system they believe will accomplish their objectives.

2. Mises uses the methods of introspection, deduction, and (incidentally) reference to fact. He fails to distinguish between the ideal use of these, which perhaps would result in a perfect praxeology consisting of incontrovertible truths, and the use of them by a fallible mortal like himself. Introspection is a valuable scientific tool, but its very immediacy, which enables the user to avoid errors of more roundabout methods, may lead him to subjective bias, inaccurate generalization from himself to all others, and overconfidence in the soundness of his conclusions. The conclusions should be checked carefully by other methods, such as observation of the behavior of persons unlike one's self and questioning of them concerning their motives. Mises often rashly assumes that persons who act as he would, do so for the same ends which he finds in himself and that those who act differently seek the same ends but have erroneously chosen the wrong means. Any person's ends may be arranged as "means" to more remote ends in an indefinite architectonic chain. Logical error may occur in his choice of means for a given end or in his rationalized statement of the ultimate end for which a more immediate end is desired. No fallacy is more widespread than that of calling another man a fool because his actions do not promise the attainment of ends which observers impute to him based on their own introspection. In Mises' uncritical usage introspection becomes not a scientific method but the basis of a creed. The words which he attributes to the worshippers of collectivism may with equal appropriateness be attributed to the worshippers of introspectivism: "We are right because an inner voice tells us that we are right and you are wrong" (p. 152).

Are the praxeological axioms universally and incontestably true in the same sense as the laws of logic? The denial of the laws (or rules) of logic results in absurdity. The denial of Mises' laws does not. From the rules of logic alone no substantive propositions can be deduced. Idealists and materialists, atheists and Thomists, capitalists and communists all may use the rules of logic with equal facility to arrive at or support their opposed positions. But Mises attempts to deduce substantive propositions from his laws—*e.g.*, that governmental curbs on the drug traffic, or alcoholic "prohibition," lead to socialism (pp. 728-29).

That Mises' use of logic as a scientific instrument falls short of perfect rigor may be readily demonstrated. (a) After telling us that "it is nonsensical to reckon national income or wealth" or other aggregates (pp. 218-29), he insists that the free market "raised the average standard of living to an unprecedented height" whereas intervention's "inexorable final consequences" include a "drop in the quantity of goods produced" (pp. 741-51).[1] (b) His example of choice on page 201 (operas) does not lead to his inferences.

The higher a deductive edifice is built, the more numerous are the syllogistic steps required in its construction and the more numerous are the assumptions (stated or implied) on which the structure rests. The probability of error (except for supermen) increases with both.

So far as empiricism is concerned, Mises tells us his axioms are logically

[1] Assertions of the latter type are attributed elsewhere to "understanding," not "reason" (pp. 674-75), but not in the above citations.

prior to fact and therefore cannot be tested by fact. Yet he often (and Rothbard: *e.g.* 6, d) cites facts as if they provided support for his conclusions and for the axioms, postulates, and logical procedures from which the conclusions have been derived. Mises thus disarms his critics of a weapon which he renounces in principle but uses in practice. And such phrases as Rothbard's "universally recognized" (points 2 and 4) or "everyone will consider" (point 5) surely are not meant as empirical assertions, since "the vast majority" cannot "grasp complex chains of abstract reasoning" (point 6, e).

3. The fact that Mises is able to criticize and improve upon the doctrines of eminent predecessors whose intellectual powers were not inferior to his own should lead him not to arrogance but to the expectation that his own incontrovertible truths some day will meet a similar fate.

4. In the passage to which I referred, Mises' adulation is bestowed not upon the adoption and use of a monetary standard as such but upon that of the gold standard in particular and his wrath is vented not upon critics of a monetary system but upon critics of the international gold standard. For example: "Nobody is in a position to tell us how something more satisfactory could be put in place of the gold standard" (p. 470). The point of my criticism is that Mises does not label his assertions as praxeological axioms, praxeological propositions, historical observations, or personal opinions, so that it is difficult for the reader to know how to treat them.

5. The second assertion is not mine. Mises admits that his free market has never existed. He constructs a pier on his theoretical island of free competition, but how can he build a span from this to historical reality? Another independent pier, even on another theoretical island, would help. But Mises' socialist pier is simply a downward appendage of his span from free competition. If one insists on using the praxeological method, one's principles should be numerous and complex enough to serve as a guide in understanding the various general *types* of historical situations, even though they may never fully explain the *cases* under each type. For this purpose a single standard would be adequate only on a unilinear assumption: *i.e.*, that (a) all possible variations in market conditions, size of firms, unions, tax laws, antitrust laws, monetary regulations, etc., can be arranged in a continuous scale stretching between free competition and socialism and (b) the scale of interventionary degrees is paralleled by a scale of functionally related consequences ranging, say, from full utilization of resources at one end to zero production at the other. If something of this nature is not Mises' position, his single standard of free competition requires supplementation. If this is Mises' position, and if we may test it with facts, then it is clearly false, since (as J. M. Clark, Arthur R. Burns, and others have shown) there are many cases in which an increase in intervention leads to results which approximate more closely, not less closely, those attributed to free competition. For example, during World War II the United States economy experienced the greatest amount of intervention in its history yet national production and capacity soared to a record high. This does not prove that intervention or war is desirable but it calls for an explanation more complicated than Mises' single standard.

6. Acceptance of Mises' stated axioms does not necessarily imply acceptance of the "principles" or "applications to reality" which he has drawn from them, even though his logic may be impeccable. When a logical chain grows beyond the limits set by stated assumptions, it uses unstated assumptions. The number of unstated assumptions (axioms, postulates, or other) in *Human Action* is enormous. If Mises denies this, let him try to rewrite his book as a set of numbered axioms, postulates, and syllogistic inferences using, say, Russell's *Principia* or, closer home, Von Neumann's *Theory of Games* as a model.

a. To Mises duopoly and oligopoly are not types of market relationships but transitional phenomena, "a scheme for the attainment of a monopoly position." "One may wonder whether duopoly and oligopoly are of practical significance. As a rule the parties concerned will come to at least a tacit understanding concerning their quotas of the reduced amount of sales" (p. 360). Are these intended as principles or as descriptions of reality? If the latter, we can test them by empirical investigations—and we will find them highly doubtful. But whether intended as principles or not, do they necessarily follow from Mises' stated "axioms"?

b. The passage cited by Rothbard deals with "The Role Played by Unemployed Factors of Production in the First Stages of a Boom" in which "unused capacity . . . is an outgrowth of errors committed in the past." Credit expansion, Mises tells us, then results in an "inappropriate expansion" of one or a few industries. In my review I referred to the effect of interventionary credit expansion "under large-scale unemployment." Even if one grants that this unemployment is the result of certain past interventionary measures, one may logically assert that certain present interventionary measures may diminish this unemployment without creating more severe maladjustments than would occur in a non-interventionary revival. The same unilinear fallacy occurs in Mises' refutation of Keynes (p. 737).

c. If a partially free market could persevere in the past, then perhaps intervention is not cumulative and perhaps the rudiments of the free market will survive the rough handling of New Dealers and socialists enough to preserve civilization and the human race in the future.

d. Mises asserts that capitalism is being beset cumulatively by "economic depressions, mass unemployment, capital consumption, famines," "exhaustion of the reserve fund," "restriction of output," etc., (pp. 851-55). Many whom he would call interventionists and socialists agree in large part with him, but for different reasons—*e.g.*, Karl Marx, J. M. Keynes, Alvin Hansen, or Benjamin Higgins. Some supporters of the free market quite as vigorous (if not as extreme) as Mises, on the other hand, have combatted in whole or part the stagnation thesis—*e.g.*, Carl Snyder, George Terborgh, J. Frederic Dewhurst, or H. G. Moulton—generally on the ground that the ravages of intervention, as well as of "maturity," have been insufficient to destroy the effectiveness of the free market component of our economy. Mises does not attempt to meet their arguments. Rothbard's cases may be interpreted in many ways. One may say, *e.g.*, that the triumph of intervention in England today is the consequence of the previous rule of Mises' philosophy. This is an inadequate

explanation, but it contains at least as much truth as Rothbard's.

e. I do not believe consumers are as rational or informed and voters are as irrational or uninformed as Mises or Rothbard claim. Producers spend years learning their specialties, as do economists and politicians; consumers and voters are Jacks-of-all-trades who can be fooled by specious arguments not only of unscrupulous or ignorant economists and politicians but of unscrupulous or ignorant shopkeepers. Complex chains of reasoning are required for consumers to select intelligently an automobile or television set. Political decisions often are more difficult than shopping decisions, yet the same policy difficulties that perplex the electorate frequently perplex those elected representatives (and social scientists) who are aware of their own limitations. Politicians have often been accused of entertaining no ideas of their own and of supporting policies which they believe will maintain the constituents' effective demand for their re-election. The principle of modified or limited competition is at work in a democratic polity and a market economy, with the consumers and voters sometimes ruling, sometimes being ruled, in each. In alleging that consumers are rational and voters are irrational Mises provides us with his own brand of "polylogism." And if the voting public "do not possess" "powers of reasoning," then the chances of adoption of Mises' praxeology under a democracy are slim indeed, unless the elected "dictator" can be won over directly. Some of Mises' and Rothbard's statements seem to imply that if they had to choose between democracy plus intervention and outright dictatorship plus the free market[2] they would choose the second.

7. My interpretation here is based on such assertions as the following: "Where there are no money prices, there are no such things as economic quantities. . . . There is no means for man to find out what kind of action would best serve his endeavors to remove uneasiness as far as possible" (p. 210). "Those things which do not enter into the items of accountancy and calculation are either ends or goods of the first [consumer] order." In this sphere (*e.g., Hamlet* and the detective story) choice is mere ordinal comparison (p. 216). Rothbard has convinced me, however, that my interpretation is erroneous, that Mises requires calculability for intelligent choice only in certain "economic" means-ends relationships, and that point 6 of my review, except for its last sentence, should be withdrawn. The contradiction between Mises' treatment of economics and politics will have to be reconciled on some ground other than that in my review. My error is based on an ambiguity that runs through the entire book. Mises' propositions that subjective value economics may be extended into a general theory of human action (p. 3), that "economics [is] up to now the only elaborated part of praxeology" (p. 66), that all action is an "exchange" of "a less desirable condition" "for a more desirable" one (p. 97), and that economics cannot be precisely distinguished from praxeology (p. 235) make it difficult to determine not only in what area of human action he requires calculability but also to what extent most other principles of *Human Action: A Treatise on Economics* are intended

[2] The two elements of each alternative are conceptually compatible.

to apply to the subject matter of its title, on the one hand, and to what extent they fall into the more modest range of inquiry designated by its subtitle, on the other.

8. "Coherence" and "stability" may be prerequisites for conceptual existence in the land of praxeology but "incoherence" and "instability" thus far have characterized space-time existence in the world of history. It is a more important qualification for an intelligent course of action to be *possible,* no matter how transitory, than for it to be "logical." Nowhere does Mises prove that the purely free market possesses the former attribute; coherence and stability are insufficient evidence of practicability, even on his own grounds (*e.g.,* socialism).

What does "interventionist measures logically lead to" mean? Either Mises believes that interventionism is cumulative and necessarily leads toward socialism and into "chaos" (another undefined term), or he does not. If he does, can he explain how western nations reversed mercantilist intervention and established partially free markets in the 18th and 19th centuries, or how they accomplished partial decontrol after World Wars I and II? Can he explain how the purely free market is ever to be attained? On the other hand, if interventionism need not be cumulative (and Rothbard says it logically leads to the free market as well as to socialism) then is it necessarily incoherent, unstable, and transitory? If interventionism logically points in two opposite directions (toward zero and infinity), does it have to continue in either until it reaches respectively Elysium or chaos?

9. If "all intervention is irrational," then how can Mises sanction it for "defense of the citizen against violent invasion of his person and property"? Mises says: "The decision about each restrictive measure is to be made on the ground of a meticulous weighing of the costs to be incurred and the prize to be obtained." In fire regulations the prize outweighs the costs (p. 741). Thus he admits that government interference in the private markets for armaments, mercenary soldiers, non-fireproofed buildings, or burglar's equipment can attain the ends sought and need not lead to socialism. Once he grants the distinction between intelligent and unintelligent intervention, and even the need for the former to preserve a partly free market economy, Mises leaves his sectarian Utopia and joins the rest of us in choosing among imperfect but possible alternatives in the real world.

10. The book is too short in its omissions, too long in its repetitions. On the latter, the readers of the book will have to judge for themselves.

11. The fact that Locke used the term "uneasiness" makes it, to Rothbard, the traditional translation of the German word "*Unbefriedigtsein.*" Locke defined "uneasiness" to contrast with "satisfaction."[3] In this sense it is today more than "traditional": it is archaic.[4] Uneasiness, in modern usage, implies an anxiety that conditions are going to become worse; *Unbefriedigtsein* in Mises' as well as general usage implies a desire to make them better.

George J. Schuller

[3] Essay of *Human Understanding,* Bk. 2, Chap. 21, §29.

[4] *Webster's New International Dictionary,* 1944, p. 2772: "uneasy," 6 c.

Consumption Taxes and Income Determination: Comment

In a recent article in this *Review*,[1] Professor E. Cary Brown has clearly demonstrated that there are differences in the anti-inflationary effects per dollar yield of an income tax and a consumption tax, differences which exist even if it is assumed that all consumer units have the same marginal propensity to consume. He concludes that, under conditions of what he terms a consumers' "money illusion" (money consumption expenditure dependent upon money disposable income), a dollar of consumption taxes will reduce real consumption by more than will a dollar of income taxes, while, under an assumed "real" consumption function (real consumption dependent upon real disposable income), similar results hold provided equilibrium savings are positive.[2]

Alternative postulates regarding the linear consumption function, however, will yield different results. In particular, if it is assumed that *real* consumption depends upon *money* disposable income,[3] the resulting conclusions are directly contrary to the above: the anti-inflationary effects of consumption taxes are less than those of income taxes.

The imposition of a proportional consumption tax, with the base being consumer expenditure before the inclusion of the tax in price, raises prices by the amount of the tax but leaves money disposable income unchanged. If it is assumed that real consumption depends upon *money* disposable income, there will be an attempt to maintain real consumption by the expenditure of a dollar sum now increased at any money income level by the amount of the tax. The increase in money consumption is as great as the tax-induced price rise, with savings decreasing and real consumption maintained.

A proportional income tax, on the other hand, which lowers both money and real income directly, rather than leaving money disposable income unchanged and decreasing real income via price rises, does aid in reducing real consumption. With real consumption a function of money disposable income, real and money consumption decrease to a level consistent with the reduced level of money disposable income. It can thus be concluded that, under the above-mentioned assumptions regarding the consumption function, an income

[1] E. Cary Brown, "Analysis of Consumption Taxes in Terms of the Theory of Income Determination," *Am. Econ. Rev.*, Vol. XL, No. 1 (March, 1950), pp. 74-89.

[2] *Ibid.*, p. 87. The qualifications Professor Brown makes, as well as the simplifications (a closed economy, no corporate saving, etc.), also apply in this paper.

[3] A fourth logical possibility also comes to mind: money consumption expenditure dependent upon real disposable income. In this case an increase in prices without an accompanying increase in money personal income, as would take place were consumption taxes imposed and shifted entirely to the consumer, would mean a fall in real income and a consequent downward adjustment of money consumption expenditure at each level of money personal income. And, since prices have risen, *real* consumption would be cut even lower. This case is by far the most favorable for a consumption tax. It is, however, highly unrealistic. It implies that when real income falls due to price rises, consumers spend less money on consumption, at any given level of money income, adjusting their money spending to their real income. Although this case might have some applicability to those individuals attempting to maintain a rate of real savings, it seems unlikely as a description of aggregate behavior.

tax is more anti-inflationary than a consumption tax. The latter, in fact, is useless as long as the posited conditions continue.

How likely is it that such results will occur? Or, more basic, how likely is it that real consumption is more a function of money income than of real income? In so far as such phenomena as money illusions exist, such a postulate is certainly within the realm of probability. In a sense, this case is better termed the money illusion consumption function than that in which money consumption depends upon money income. The latter is a complete money complex; everything is in money terms. But a money *illusion* essentially involves a failure to grasp changing relationships between the real and monetary spheres. If it can be assumed that basically people do try to adjust their real consumption to their real income, but that they at times interpret their money income as being much the same thing as their real income, especially in short-run situations, then the aforementioned results are plausible. With prices rising and money income constant, real income falls. But people customarily associate a

TABLE I.—CURRENT DOLLAR AND REAL INCOME AND CONSUMPTION, QUARTERLY, 1946–1947

Period-Year and Quarter	Disposable Personal Income	Personal Consumption Expenditure	Consumers' Price Index (1935–39=100)	Real Disposable Personal Income	Real Consumption Expenditure
1946					
1	152.5	137.2	129.9	117.4	105.6
2	156.4	142.3	132.0	118.5	107.8
3	162.1	152.0	143.7	112.8	105.8
4	164.6	156.1	151.4	108.7	103.1
1947					
1	165.4	159.5	154.3	107.2	103.4
2	164.2	163.9	156.4	105.0	104.8
3	171.7	167.6	160.8	106.8	104.2
4	176.5	171.3	165.2	106.8	103.7

Source: The first two columns are seasonally adjusted quarterly totals at annual rates, in current dollars, from *Survey of Current Business*, July, 1950, pp. 30–31. The Consumer's Price Index is a quarterly average of the BLS index.

certain level of *money* income with a particular standard of living, especially after a period of price stability. As a result there will be a strong tendency to consume as much as previously in real terms, even though real income is lower. Savings are drawn upon and consumer credit rises.[4]

Data regarding the pattern of much of the first half of the immediate postwar American inflation, while not conclusive, is suggestive of the actual short run importance of the above. As Table I indicates, from the second quarter

[4] Such a view fits in with the ideas of Modigliani and Duesenberry regarding the influence of past standards of living. The very process of inflation, in fact, can be looked upon as a competitive attempt to maintain standards of living in the face of price induced declines in real income. *Cf.* Franklyn D. Holzman, "Income Determination in Open Inflation," *Rev. Econ. Stat.*, Vol. XXXII, No. 2 (May, 1950), pp. 150-51, and Arthur Smithies, "Behavior of Money National Income Under Inflationary Conditions," *Quart. Jour. Econ.*, Vol. LVII (November, 1942), pp. 113-28.

of 1946 through the second quarter of 1947, real disposable income continuously fell, *i.e.*, prices rose faster than money disposable income. During two of these four quarters real consumption increased; if the third quarter of 1946 is compared with the first quarter of that year, real consumption increased in three of the four quarters in which real income fell. In the words of Robert V. Rosa, "Willingness to follow rising prices, in attempting to preserve accustomed real consumption, has been extremely significant in the shifts which occurred during 1947."[5]

Such a reaction to price rises involves decreasing rates of saving, the using up of accumulated liquid assets, and growing consumer indebtedness. Thus it can hardly continue for too long a time. Consumer credit controls would be one step toward curbing this tendency. Another would be to differentiate between types of consumption taxes. A spendings tax can be made highly progressive more easily than can a sales tax, a feature which will make the cost of sacrificing savings increasingly greater.[6]

LAWRENCE S. RITTER*

[5] "Use of the Consumption Function in Short Run Forecasting," *Rev. Econ. Stat.*, Vol. XXX, No. 2 (May, 1948), p. 101.

[6] *Cf.* also the proposal of James Tobin, "Taxes, Saving and Inflation," *Am. Econ. Rev.*, Vol. XXXIX, No. 6 (December, 1949), pp. 1223-32, which would require a certain amount of compulsory saving or the deprivation of income by what amounts to an income tax.

* The author, instructor in economics at Michigan State College, is indebted to Jacob Schmookler for helpful suggestions.

BOOK REVIEWS

Economic Theory; General Economics

The Sociology of Georg Simmel. Translated with an Introduction by KURT H. WOLFF. (Glencoe: The Free Press. 1950. Pp. lxiv, 445. $5.50.)

Georg Simmel should be better known to economists. His analysis and insights throw light on many dark areas of economics. Moreover, he concerned himself with social processes which could enlarge and reorient a considerable amount of economic thinking—or what passes for it.

Simmel's influence in sociology, through the help of Albion W. Small, Park and Burgess, and Nicholas J. Spykman, has been quite large and there is a rather extensive literature on him. Still, until the appearance of Professor Wolff's translation, only a small and scattered part of his writing was available in English. His major works in philosophy and ethics—and a great one in economics—have yet to be translated. We should be particularly grateful for Professor Wolff's smooth and scholarly rendition of two of Simmel's major sociological treatises: Simmel's last comprehensive statement in sociology, *Grundfragen der Soziologie (Individuum und Gesellschaft)* (1917), is given in a complete form. And Professor Wolff has translated a significant portion of his principal work in sociology, *Soziologie, Untersuchungen über die Formen der Vergesellschaftung* (1908). The volume also contains Simmel's famous essays, *The Stranger* and *The Metropolis and Mental Life.*

Professor Wolff has prefaced his translation with an introduction appraising Simmel's contributions and providing a carefully annotated bibliography of Simmel's works, the translations into English and the literature on Simmel. To this reviewer, reading Simmel from an economist's viewpoint, it seems that the introduction would have been better had it stressed less Simmel's contributions to sociology and more, his specific insights into sociological processes.

The most familiar aspect of Simmel's sociology is his effort to establish what he called "formal" sociology, *i.e.*, to discover "societal forms," *e.g.*, superiority and subordination, competition, division of labor, formation of parties, representation, etc. He tried to distinguish these from "general" and from "philosophical" sociology, but these distinctions, as Professor Wolff indicates, places his analysis on "insecure foundations." Simmel's concern with methodology and philosophical aspects of sociology are less important and certainly less stimulating than his analysis of certain aspects of social life. It is best to read him, not as an organic and systematic treatment of sociology but as a provocative and creative analysis of man and society. The economist will find in him discussions of many familiar economic prob-

lems, approached in significantly new ways. And many factors not now considered in conventional analysis will demand attention after reading Simmel.

One may cite a few examples. Simmel's discussion of the individual and society, the individual and freedom, and freedom and socialism, all of which may be found in other places, nonetheless form an incisive summary which cuts deep into the naive and loose assumptions of individualism and society which underlie most economic analysis.

In economics, there has been an unbelievable absence of the concept of "group" (except bad-boy monopolists and short-run hysterias). Simmel has much to offer in his chapters on the Quantitative Aspects of the Group. His discussion of the "dyad" (union of two) suggests many aspects of duopoly hardly noted in the usual analysis. And the Triad, as Simmel presented it, illuminates not only oligopoly but also the sociological significance of the "third element" in labor arbitration and the divide-and-rule techniques in labor-management relations.

A keen section on the Tertius Gaudens (the third party who gains from the quarrel of two others) is a most revealing analysis of the consumer's gains from competition.

For the economist concerned with modern group enterprise, perhaps the greatest stimulation will come from Simmel's profound contributions on Superordination and Subordination. He gave minute study to all aspects of domination and submission. Every sentence opens new vistas on our group organization of economic life. These should stimulate investigation into every positional relationship involved in the productive unit, in labor-management coordination, in labor union organization, etc. For example, this sentence: "Even the abstract will-to-dominate, therefore, is a case of interaction." And much subtle, sardonic wisdom resides in his comments on Coordination and Reciprocal Super-Subordination—the domination in some phases of behavior and submission in others. "Probably," Simmel observes, "What is called the 'equal rights' of man and wife in marriage—as a fact or as a pious wish—is actually to a large extent such an alternating superordination and subordination." I wonder what is marginal analysis's answer to the same problem!

Simmel constantly made use of his ideas on money as a sociological fact. These were part of an earlier work, *The Philosophy of Money*, a classic, still not translated. Simmel had a magnificent view of the intricate and obscured personal and societal effects of a money economy. He was concerned, not with money as a veil, but the veil of money which becomes an article of clothing and a vestment of the spirit, not a medium of exchange but an exchange of the spirit for the medium.

To appraise the value of Simmel's sociology for economists, one must consider the relation of the science of sociology to that of economics. Obviously, there will never be a day when a completed sociology can be integrated into a completed economics. It is likewise unlikely that segments of one or the other can be incorporated as units. But certain aspects of social behavior, which can be generally summarized, can be used to illuminate processes of specific behavior. Economics can become aware of definite social concepts which are not being used in the explanation of economic conduct. And for

this necessary advance, the astute, exploring mind of Georg Simmel, now more accessible in Professor Wolff's well-considered selection, can be a source of stimulation and direction.

MENO LOVENSTEIN

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La Méthode de l'Économie Politique. Second edition, revised. By BERTRAND NOGARO. (Paris: Librairie Générale de Droit et de Jurisprudence. 1950. Pp. 270.)

Most writers in the Anglo-Saxon tradition of political economy have seldom dealt in a systematic fashion with questions of methodology. Authors like J. N. Keynes, Robbins, and Cairnes have only incidentally discussed certain methodological aspects that have fitted in with their general area of interest. When the substantial and systematic work on this subject by such a well-known author as Professor Nogaro first appeared in 1939, it attracted generally favorable attention. This second edition should be even better received than the first, for, while the spirit and organization remain the same, it is easier to read, and many of the rather burdensome examples have been eliminated or abbreviated. Enough examples remain, however, to illustrate amply the author's conclusions. New material has been introduced, and in some respects Nogaro seems to adopt attitudes that do not clash so sharply with those that are generally accepted in the English-speaking world. Rewriting has contributed to clarity and understanding throughout the book.

In the preface to the first edition and again in the conclusions, he discusses, all too briefly if he wishes to persuade most economists, the reasons for studying methodology. A whole book could usefully be written on these reasons, for, judging by the literature, most economists believe with Pareto that "discussion of method is a pure waste of time." Yet, many a school that has not even an undergraduate course in methodology teaches that economics is not a fixed doctrine but rather a method of study. What method? Nogaro replies that since political economy is primarily one of the *"sciences d'observation,"* economists cannot neglect historical and statistical research. Only from a painstaking study of facts can they theorize. He recognizes the use that the work of econometricians can be in economic studies but is always a bit disdainful of purely deductive theories, which he considers to belong more to scholasticism than modern science.

In view of the range of topics discussed, it would be incorect to say that the book has a single theme; yet it has unity, brought about by the author's development of his conception of political economy as a "science of observation."

In résumé, Nogaro finds that, because we can never enunciate propositions of a general character (develop theory) without first studying facts, we must be concerned, as economists, with historical research and statistics. Theory and description are not opposed, but good theory is formulated from observation and most often from a study of history. History, of course, is to be understood in a broad sense as phenomena which are the product of human acts. An economist should state nothing that he is not able to demonstrate

and must always be concerned with accurate descriptions of reality. Theories must always correspond with the facts they are supposed to explain. The primary aim is to understand (*verstehen*), not, as in the physical sciences, to explain (*erklären*). Therefore we must attempt to establish relationships of cause and effect. The "*méthode d'observation*" attempts to explain each phenomenon by finding its antecedent and thus tends to establish causal relationships. The goal seems to be a theoretical schema that is valid without consideration of time and place (*allgemeingültig*), as well as one that can be verified by observation of the corresponding concrete cases.

Many of Nogaro's ideas are already quite generally accepted, but some, particularly those having to do with causal relationships, might be disputed. Objection could be made, based on recent developments in modern physics. In that field, we see a growing reluctance to work with causal relationships. Thinking in terms of probabilities and relativity seems to be more fruitful. The recent discovery of secular changes in that basic constant, the velocity of light, will probably give added impetus to the present trend. These developments may weaken Nogaro's conception of causality, but until advances made in physics are applied profitably in economics, his basic case deserves serious consideration.

Nogaro specifically denies any intention to revive the old historical-vs.-classical-school controversy. He does make an attempt to find what is useful in both of their methodologies. There is little doubt that he feels historical study has too often been neglected in favor of classical or deductive thinking. To redress the balance, he includes a section (Chapter IV) on the dangers of strictly deductive reasoning in economics. Among the arguments he puts forth are the following: there is a danger of proposing *a priori* to discover regularities or equilibrium—perhaps no such things exist; in the past, economists have made errors with respect to reality because, in order to be able to deduce, they have employed as few simple premises as possible—economic reality is not simple. In other words, by simplifying their premises they have systematically distorted the *données* upon which they base their conclusions. Even those who do not agree will find this discussion stimulating and provocative.

Compared with his earlier writings on mathematics, one finds, I think, a willingness to concede a greater area of applicability to this subject. The last two chapters, VI and VII, are devoted exclusively to consideration of the relationship of mathematics to economics; the one discusses mathematics as formal logic, and the other, mathematics as a means of investigation. In Chapter VI, he insists that functional relationships do not indicate enough about causality to make them of more than limited usefulness. He mentions stochastical schemes but only in a quotation. In Chapter VII, among other things, he discusses models and uses a simple, dynamic example concerned with the *marché du vin en France*. Econometric methods, according to the author, are very useful and complement his method nicely.

One who has read widely in the literature of political economy will undoubtedly find material that is covered elsewhere; yet it will be seen that this book goes beyond any other single work in its analysis and critical perspec-

tive. Although it is unlikely that everyone will agree with all of its conclusions, the book does raise basic questions which we are too prone to ignore. The work could be used as a text for courses in economic methodology; unfortunately, it does not have an index—a chronic French disease. It is a pity that it will probably not receive the wide audience it deserves, for most economists reared in the Anglo-Saxon tradition could benefit greatly from more understanding of the work of their continental colleagues.

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The Income of Society: An Introduction to Economics. By ELIZABETH ELLIS HOYT. (New York: Ronald Press. 1950. Pp. xii, 753. $4.50.)

The Income of Society is a welcome addition to the growing body of elementary textbooks in the field of economics. To the instructor whose intent is to select the best text for his students, the very number of new textbooks in the field presents an embarrassing problem of consumer choice. This wealth of "introductions" reflects the rapid increase in general demand for college texts due to the secular increase in our student population; it reflects the great urgency felt by many writers to provide better education in economic principles for a democratic citizenry; it also reflects the great difficulties of translating the traditional body of economic theory into a meaningful "introduction" on a more elementary level.

The first section of Professor Hoyt's book, Creation of Income, deals with the problems of economic choice. It explains the basic concepts of margin and equilibrium in their application to the student's most precious resource, time (p. 25). The importance of these concepts is indicated for micro-economics as well as macro-economics (p. 29). Other chapters of this section describe the input factors and their combination under conditions of modern technology, discussing problems of business organization and the essentials of the "spirit of enterprise" (p. 147). A long chapter is devoted to wants because "wants are the forces on which income creation depends" (p. iii). This chapter deals with materials taken from "a no-man's land between anthropology and psychology, and between them both and economics" (p. 45), in an attempt to adopt, on the textbook level, the Gestalt or field-theory approach which is now the dominant trend in psychology. This approach appears well designed to give the student feel for the integration of the social sciences and an understanding of culture patterns within which economic decisions are made.

The second section of the book, Price, analyzes the pricing of market goods as well as the pricing of the input factors of production. It contains a brief discussion of competitive market price as well as price under monopoly. The distributive shares of productive agents are explained as prices determined in the factor market, though these chapters contain no marginal productivity theory of rent, interest and wages, to avoid "the confusion arising from the inappropriate application of marginal productivity to distribution" (p. 257). One chapter deals with the price of labor and, obviously, cannot escape the great difficulty of discussing such a complex problem within the brief compass

of ten pages. The fact that women usually receive lower wages than men, even for the same work, is explained as arising from a deep and partly unconscious social attitude which "has nothing whatever to do with the equilibrium price of labor" (p. 274). Yet, is not any equilibrium price shaped by partly unconscious social attitudes? Miss Hoyt appears to use here the term equilibrium in a sense of social justice, an implication of the term she carefully avoids in other parts of the book.

Monopolistic enterprise and the public's protection are discussed at length in the third section, The Modern Market. The first chapters of this section deal with the consumer's stake in monopoly. While this discussion rightly stresses the ubiquity of monopoly, the student cannot but get the impression that our own economy is distorted by monopoly to such an extent that the ideals of competitive resource allocation and free enterprise are of quite limited significance. It raises the question whether teachers of economics do not have the responsibility of emphasizing that, while imperfections are inherent in any market economy, there are wide differences in the degree of imperfection, and that free choice, while certainly influenced by monopolistic restrictions, by advertising, and by many other imperfections, still has in our economy a wider range than in most other historical or contemporary social settings. In emphasizing the dangers of monopoly, the writer's discussion of our agricultural programs and "what commodity pressure groups can do" (p. 564) deserves special credit.

This section also contains some chapters describing the institutions facilitating market transactions, such as money and credit, as well as disturbances in the market mechanism, such as the business cycle. The last four chapters of the section deal with international economics. In Miss Hoyt's words, "all economics is international in the sense that every choice ultimately reacts on every other and there are no final boundaries either of land or sea. International economics is treated as a division in itself simply because political self-consciousness, cultural differences, and emotional strains have set up more barriers among nations than exist within any single nation" (p. 428).

In the fourth section, Division and Use of Income, much more space than in most texts is given to income use. The first chapters of this section deal with the division of income and the problems of special groups, such as labor and farmers. Fiscal policy is treated as an aspect of redistributing income. The remainder of this section contains a detailed discussion of the economics of food, health, and housing, reflecting the interest of the author in problems of home economics. Some concluding chapters are concerned with standards of living and public policy for a national minimum.

Emphasis on use as the economic goal is brought to a head in the three chapters of the final section on Economic Progress. There are some wise remarks on the meaning of economic progress, defined as "a long-run net increase of human utilities by economic means" (p. 703). A chapter on measurements of economic progress informs the student of available indices and their limitations. The final chapter, on Economic Progress and Social Cooperation, contains some moving observations on the most pressing challenge of our

times: international cooperation to protect civilization. "There can safely be any amount of variety of tradition, culture, and experience so long as we have a sense of community underneath. The imagination that leads to enlargement of community is best appealed to through our common physiological needs and our common needs for dignity and self-respect. The means for meeting these needs come from our limited resources of time, energy, and wealth. The means are economic" (p. 737).

While the book is called *The Income of Society,* it is not a text applying modern income analysis. There are constant references to income as the ultimate economic objective—its creation, its division, and its use—but there is no effort to use social income accounting as a common framework for the different issues discussed in the several sections of the book. Even with elementary students, the analysis of individual price determination (micro-economics) could proceed with constant reference to national aggregates (macro-economics). Many of the recent texts have attempted such an integration to avoid the dangers that arise from discussing the economics of individual units and problems of the total economy without a common thread. While this reviewer regrets that Miss Hoyt has not found it advisable to use the modern income approach, it should be emphasized again that her book compensates with excellent chapters to arouse student interest, relating economic problems to broader issues of social policy. "Students are always interested in economics to the extent they can see it enters their own lives, but most of them need the help of a social setting to recognize what the boundaries of their lives may be" (p. iii). Professor Hoyt's book will give the student some perspective for this social setting.

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Elements of Economic Analysis. By Archibald M. McIsaac. (New York: Prentice-Hall. 1950. Pp. vii, 240. $2.25.)

A severe tribulation awaits anyone who tries to find a text for a one-term course in introductory economics. McIsaac, in *Elements of Economic Analysis,* offers one that seems designed specifically for this type of course. It is frankly experimental, but not sufficiently unorthodox to alienate many instructors.

Part I deals with price analysis. Like Marshall, McIsaac first treats the subject of demand (Chapter I). Although the approach looks a trifle unusual, the substance of the chapter is substantially traditional. The same freshness of treatment and orthodoxy of substance characterizes the second chapter which deals with supply and cost of production. Chapters 3 and 4 tie the first two together with a discussion of price formation and price-production policy. A section on in-line-pricing, price-lining, mark-ups, and other administered prices, although not very extensive, is welcome. The final chapter of Part I is devoted to a discussion of price structures, levels, and trends.

What makes Part I unusual are some of the techniques, *e.g.,* the use of total cost and revenue functions instead of the usual marginal and average functions, and some of the topics covered, particularly in Chapters 3 and 4. It is difficult to see what has been gained by some of the innovations, for instance,

price radials, but others, such as break-even charts, are especially commendable. It is unfortunate that McIsaac, in choosing a break-even chart, made the unhappy choice he did. He uses the ordinary total cost and revenue functions. The reader is told that the break-even point is that point at which the total cost function cuts the total revenue function from above. This break-even chart actually adds nothing to traditional analysis, yet the student is given the impression that this is a fairly radical departure from it. The break-even chart is, nevertheless, a concept which the instructor can tell students is used by industry. And some will undoubtedly be relieved to be able to avoid the embarrassing question whether industry uses the marginal analysis. That should be a welcome change.

Part II emphasizes macro-economics, but also attempts to integrate it with micro-economics. In Chapter 6, which deals with profit expectations and incentives of enterprise, the dual rôle of the enterpriser as supplier of goods and demander of factors is clearly demonstrated. The connection between the decisions of enterprisers and the income of the nation can be seen. There is also considerable emphasis on the rôle of expectations in producers' decisions. Here McIsaac associates *ex ante* and *ex post* concepts with budgeting and accounting aspects of business enterprise. Profits are examined from many points of view, including the risk-taking, monopoly, and accounting aspects. The subject matter of Chapter 7 is definitely more aggregative. The first part covers the G.N.P., its associated concepts, and the distribution of the national income. The discussion is brief as is also the outline of the Keynesian model which completes the chapter. The attempted integration of micro- and macro-economics is found in Chapters 8 and 9. Unfortunately, this turns out to be a partial equilibrium analysis.

Part III deals primarily with investment. Chapter 10 discusses real investment and the usual problem of valuation of durable assets. The next three chapters cover the demand for funds and methods of financing (Chapter 11), the problems of financial investment and trading in securities (Chapter 12), and finally the sources of investment funds (Chapter 13). This last chapter includes an attempt to explain how saving is transformed into investment via the capital market. This attempt is commendable, but the chronic mixing of perspectives creates confusion. This discussion is so misleading that unless each word is weighed much more carefully than can be expected from a sophomore reader, the instructor is likely to find it even more difficult than usual to explain the equality of saving and investment.

The final chapter, entitled "Savings, Property Incomes, Investment, and Employment" rounds out the third part and the book as a whole. It is divided into two parts, the first of which deals with the traditional analysis of saving and investment and the second with the problem of chronic unemployment.

Elements of Economic Analysis has an organic unity which is refreshing. The regular texts usually necessitate jig-saw puzzle presentations of material for single-term courses. McIsaac has avoided that. Furthermore, the discussion has an air of reality about it so that the student feels that what is being examined has more relevance to the economy of the United States than to that

of Mars. In this book McIsaac has made a definite contribution to the teaching of the one-term introductory courses. As long as we have photo-flash exposures to economics with us, books of this type are more than welcome.

MORRIS MENDELSON

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Elementary Economics. By LELAND J. GORDON. (New York: American Book Co. 1950. Pp. xxx, 563. $4.50.)

Professor Gordon has made a considerable departure from the usual approaches to elementary economics. He assumes that for students who are not already interested in economics, or who do not intend to become economics majors, the approach which will create the most interest and, which will therefore, be most effective in a one-year or shorter course is through the student's own concern with himself as a consumer. He starts out in Chapter I with "Your Role as a Consumer" and "Why Do You Want What You Do?" and then discusses "The Family as an Economic Unit." After this follow six chapters on "Satisfying Consumers' Demands for Food," through which, in connection with milk, we are introduced to the concept of the market, to competition and the various forms of imperfect competition. This discussion of food then leads us finally back to the production of raw materials. The last chapter in this section, entitled "Processors Buy Raw Materials from Foreign Suppliers" relates to goods other than food and discusses foreign exchange and trade barriers.

The next section in the book "Satisfying Consumers' Wants: Other Items in the Budget" deals with shelter, household operation, clothing, automobiles, health, recreation and education. There is somewhat less theory in this section than in the preceding, although the final chapter in it, "An Over-all View of the Pricing Process" has a "Pause for Clarification," followed by a discussion of the nature of value.

Following this section is a fourth on the services of government, banks and public utilities including railroads. In this section we are introduced to a consideration of the proper areas of private and public enterprise. Here comes also the discussion of taxation.

The fifth section of the book treats distribution under the head of "Sources of Consumer Income," Wages, Interest, Rent and Profits. The sixth and final section, "Consumer Economic Problems" (obviously some special problems, since the whole book deals with consumers' problems) treats of insecurity of income (business cycles), irregularity of real income (fluctuating value of the dollar) and, finally, inequality of incomes.

It will be seen that it would be hard to make a more thorough-going attempt to introduce economics from the point of view of the consumer, and Professor Gordon has brought ingenuity and a deep interest to his task. It is obvious that the treatment of economics would be much more appealing and much more significant to students in general if there were more of a consumer's point of view in it. Students who have "finished" economics often ask "what bearing does this have on us?" and seem amazed when it is

pointed out that both monopolistic competition and the influence of pressure groups in government, for example, were illustrated in the high price they paid that morning for a "fair-traded" fountain pen. No student who had studied Professor Gordon's book would make that mistake. Also it is undoubtedly true that economics would be more important to students and more useful to them in reaching an opinion on contemporary problems if it showed how various obstructions to competition are involved in providing them with such services as recreation and health. In discussing theory there is no reason that we should not illustrate it by the experiences we are having every day. Students would be better able to evaluate the importance of the models in theory they study if they have the limitations or qualifications of such models made clear in respect to some specific thing they pay for. It is quite possible that in the book as a whole Professor Gordon's emphasis on the individual's own interests is over-stressed in relation to the interests of society, but certainly Professor Gordon demonstrates clearly how a consumer's approach gives realism to economics in our personal lives.

The book poses for us, however, a critical question: has this dominance of a consumer's point of view done justice to the most important aspects of economics? In respect to that question, the weakest single spot in this book is the discussion of distribution as "Sources of Consumer Income." The basic trouble may be that the subject of distribution in economic literature is a confused one; perhaps the use of the word distribution was unfortunate in the first place, since it focusses attention on what is got, whereas equally fundamental is what is contributed. At all events, in economic literature distribution is in theory a part of value, relating to the production process; its actual treatment, however, is more or less descriptive, often not very closely related to any one thing. Professor Gordon tries hard to make it more vividly related to consumption. We cannot escape the fact, however, that the real source of consumers' incomes is not wages, interest, rent and profits, but production. Having faced the sources of incomes, if we do not then like the way the product is actually distributed, we are in a sounder position to make improvements: to confront the interferences there may be in the working of the system; to endeavor to provide means so that the production of those now producing little may be increased; or, finally, to say clearly, if we believe it, that some things, such as making minimum necessities more available to everyone, may be more important even than increasing the size of the total product.

Great emphasis on the importance of production and distribution in the past has tended to belittle consumption, but it need not do so, nor does a consumer's point of view need to minimize them; on the contrary, it is necessary to take full account of the dependence of consumption on production, and on the contribution of its factors, in order to do justice to consumption itself.

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The American Economic System. By FRANK D. NEWBURY. (New York: McGraw-Hill. 1950. Pp. xii, 558. $5.00.)

The author of this text, which is intended chiefly for non-economics majors in colleges and "other students outside the colleges," is a consulting economist and a fellow of the American Institute of Electrical Engineers. His purpose is to supply text material for a comprehensive course "covering the principles, institutions, structure, and operation of the American economic system." Apparently the author holds a deep conviction that most economics courses fail to give an accurate structural and operational picture of our present-day economy. This failure he attributes to the overemphasis upon orthodox "static theory," which includes the "theory of perfect competition and monopolistic competition," and to a failure to give students some grasp of the quantitative magnitude of various controlling forces and of *actual* cost and price relationships existing in the world of business.

Part I comprises two introductory chapters which picture the changes in the structure and size of the American economy over the past century and set forth the four basic requirements of a successful and durable economy: The necessity that it shall induce people to work, produce the things they want most in the desired quantities, permit workers to do the kinds of work they prefer, and distribute rewards in proportion to individual contributions. Part II reviews the "static" analysis which the author feels has laid the dead hand of orthodoxy upon the study of economics and has prevented students from attaining insight into the controlling forces operating in our "dynamic" system. The principles of a dynamic economy are set forth in Part III, and Part IV addresses itself to the problem of stabilizing economic activity in a dynamic system.

A reviewer well might quarrel with the author's critical portrayal of the "static" type of economic analysis. As the static equilibrium approach has (at least until recently) constituted the focal point of the usual course in economic principles, probably its textbook presentation, and undoubtedly its classroom presentation, has been far less mechanistic and unrealistic than this author appears to believe. In any event, the author indicates that the static equilibrium approach has led students to believe that very keen competition represents a desirable situation in our business world, whereas actually some measure of producers' control over markets is essential to create the incentive to expand production facilities and to develop new products, new machines, and new methods—the sources of progress in a dynamic economy. Orthodox theory has led students to believe that, with monopoly power, the producer, plagued by a rising average cost curve, tends to restrict production to expand profits, whereas actually in a dynamic economy featured by expanding capital investment and heavy overhead cost, manufacturers face average unit cost curves that are flat or decline gradually, thereby placing the point of maximum profit at maximum possible output.

In a dynamic system such as ours the author pictures the secret of continuous progress as contained in increasing capital investment per worker and increasing production per worker. If these continue to occur throughout

our economy, we can follow a secular path of economic betterment without concern about "secular stagnation" or the infirmities of a "mature" economy. A continuing flow of *investment* funds from private sources into private industry is the innermost secret of economic success for our society. Injection of *consumption* funds into the channels of trade for the purpose of expanding markets cannot have the same beneficent effect because basically such funds do not have the same potency in expanding productivity. The author pointedly warns against "excessively high tax rates," not so much because they directly reduce incentives, as because they create serious danger of loss of savings for capital formation. The responsibility of the federal government is not to supply investment funds but, rather, to follow those monetary and fiscal policies which encourage private investment.

While the author makes out a convincing case with respect to the basic sources of secular economic progress in our type of economic society, he is far from successful in coping with the problem of economic instability. He senses the fact that in this area government must assume responsibility for adopting monetary, fiscal and other policies which will create a climate conducive to private business decisions aggregating into a predominantly stabilizing force. As to what these policies should be, how we should go about formulating them in a setting of political democracy, and how private business decision-makers are to be enabled to forecast the vacillating policies of our federal government in a fundamentally insecure world situation, this book sadly but understandably fails to make an important contribution to economic literature.

The American Economic System is very well written and should be readily understood by upperclassmen in our colleges. There are thought-provoking chapters and portions of chapters. Probably it will not be considered a suitable course text by many teachers, although doubtless many profitably could have their students read selected chapters. Judged as a whole, the book's most serious defect is its failure to develop any fresh approach to the problem of economic stability in a "dynamic" economy which has an excellent record of secular progress.

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Economic Doctrines. By Frank A. Neff. (New York: McGraw-Hill. 1950. Pp. xii, 532. $4.50.)

When an author attempts to trace the development of economic thought in about five hundred pages, his first step must necessarily be to decide whether he wants to treat intensively the major proponents of each school of economic thought or whether he wants to present a cursory discussion of some of the main ideas of every noted economist. Professor Neff has chosen the latter course for his treatment of economic doctrines from ancient times to the turn of the twentieth century. His survey of contemporary economics could be classified neither as intensive nor as extensive, since it consists of only thirty pages and deals with only three economists, *i.e.*, Hobson, Veblen, and Keynes.

After a brief introduction, Professor Neff starts with a discussion of economic thought in ancient times; he then proceeds in the customary chronological order through the middle ages, to the Mercantilists, the Physiocrats, the Classical School, the "Nationalists," the Scientific Socialists, and the Austrian School. He concludes with a brief study of Neoclassicism, Welfare Economics, Institutional Economics, and Keynesianism. The last two chapters are dedicated to totalitarian ideologies (not usually included in a history of economic thought), and a summary. Strangely enough, this chronological sequence was once interrupted when Petty and North were discussed after the Physiocrats, though both died before Quesnay was born.

A biographical sketch of each economist precedes the investigation of his theories. These biographical sketches are very thorough, giving the interested student an excellent opportunity to evaluate each writer's philosophy in the light of his background, education, and training. The treatment that follows each biographical sketch is usually rather cursory. Such superficiality is to be expected as ninety economists are "thoroughly" covered, besides many others who are briefly mentioned. The few doctrines that are included under each economist are illustrated by unduly and unnecessarily long and frequent quotations.

The allocation of space appears highly arbitrary. Thirteen pages, for instance, are devoted to Cairnes and fourteen to Carey in spite of Professor Neff's statement that "many an argument of his [Carey's] bears the earmarks of a strained analogy and proof of his dilletantism" (p. 290), while John Bates Clark (who, by the way, was born in 1847 and not in 1874 as stated on page 390) was only considered worth one and a half pages; Walras, from whose *Eléments d'Économie Politique Pure* the "true concept of a mathematical school is customarily dated" (p. 353), one and a half; Lauderdale, one; and Schmoller, "the author of the most outstanding treatise of the historical school" (p. 360), one. Although the importance of such economists as Adam Smith and J. S. Mill cannot be denied by any economist, it seems unwarranted that thirty pages are dedicated to each of them, while Keynes rates only thirteen and Veblen, only six.

Professor Neff makes no attempt to conceal his enthusiastic agreement with classical economics. Smith's influence on the development of economic thought can hardly be overstressed but Professor Neff's statement does sound propagandistic: "As students of political science refer to MAGNA CARTA or the BILL OF RIGHTS, so students of economics turn to Smith's classic for authority and guidance" (p. 99). Not every student of the subject would agree with Professor Neff that Ricardo is "next to Smith the most celebrated among economists" (p. 158) and that the intellectual honesty of no man was ever "more searchingly explored than was Ricardo's in that, though one of the richest land owners of the time, he propounded a theory which implicated the landed class as a group with a paramount interest in retardation of the improvement in agriculture . . ." (p. 169). Professor Neff could not have forgotten that Ricardo, the defender of the interests of the rising industrial class, was closely connected with the stock exchange, that his father

was a stockbroker, and that he amassed his vast fortune on the stock exchange with the assistance of its leading members.

Professor Neff's ardor for classical ideology is carried into his discussion of Malthus, whose theory on population is not generally accepted today: "The general truths of the Malthusian theory in its statement of broad tendencies seem to stand unrefuted" (p. 149). Perhaps strangest of all is the statement that "Saint-Simon . . . was also an economic liberalist, *departing but little from the basic teaching of Smith . . .*" (p. 243, italics mine). While the *Dictionary of Modern Economics* takes the other extreme, classifying Saint-Simon as a "French Socialist,"[1] Whittaker comes probably closest to the truth when he states that Saint-Simon "cannot be regarded as strictly a socialist, though some of his theories have exercised great influence on socialist thought."[2] Hardly any follower of the classical school has been left out; even the German adherents Rau, Nebenius, von Hermann, and von Thünen have been included. But contemporary economic thought has been badly neglected. Such important economists as Mitchell, Commons, Tugwell, Fisher, and Cassel have only been mentioned, while Bernstein, Wicksell, Joan Robinson, J. M. Clark, Pigou, Hansen and Schumpeter have been disregarded completely.

Chapter XXXIII discusses briefly some of the aspects of economic control under totalitarian regimes but its title *Totalitarian Ideologies* is a misnomer. Its definition of communism is not in conformity with accepted nomenclature: "When strictly defined, communism suggests complete government control of both categories (producers' and consumers' goods) and uniformity of individual incomes" (p. 468).

Professor Neff seems to like unqualified and categorical statements. Is it actually beyond question that Machiavelli's *The Prince* "founded the modern science of politics" (p. 52), that "feudal organization was indispensable for the preservation of order and for public defense" (p. 40), that around 1800 "through the establishment of 'economic liberalism,' free competition had become universal" and, therefore, "interference with the organization of production and with relations between masters and men was unwarranted" (p. 231), and that "subsistence wages have never been common in America" (p. 372)?

In spite of its shortcomings, certain parts of this book may prove of value to the reader who has a previous knowledge of the subject. He will be particularly interested in the biographical sketches, the wealth of quotations, which familiarize him to some extent with individual styles, and the brief summaries of some little known economists. This reviewer cannot recommend this book for an undergraduate course in Development of Economic Thought.

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[1] Horton, Ripley and Schnapper, *Dictionary of Modern Economics* (Washington, Public Affairs Press, 1948), p. 294.

[2] Edmund Whittaker, *A History of Economic Ideas* (New York, Longmans, Green, 1946), p. 210.

Readings in Economics. Edited by K. WILLIAM KAPP and LORIE L. KAPP. (New York: Barnes & Noble. 1949. Pp. vi, 441. $2.75.)

This short collection of readings has the ambitious aim of providing supplementary reading materials for courses dealing with the basic principles of economics and the evolution of economic thought. It would not be surprising if many instructors find the book to be satisfactory for neither type of course. The text is too elementary for advanced courses in the history of economic thought; also, it does not include materials that would be found useful in a basic principles course.

The readings fall into three major parts which deal with precapitalist, capitalist, and postcapitalist society. The great majority of the readings, however, cover topics relating to a capitalist or market economy. They consist of short excerpts from the writings of twenty-six authors on mercantilism, classical political economy, economic historicism, socialism, neoclassicism, and theories of economic instability. At best, the selections on so many topics can do little more than serve as introductions to significant areas of economic thought. Some of the materials in Part II on the capitalistic economy are of considerable interest, since they are not found in more conventional readings on the history of economic ideas. In addition, the editors provide their own translations of selections from the writings of Quesnay, von Thünen, and Schmoller.

While the inquiring layman will certainly find this collection of readings worth while, it is very doubtful if they will have a wide appeal for serious students of economic science. The readings are in many cases far too limited for the subjects to which they apply. It is difficult to find adequate space between any two covers for selections from economic literature which span the long period between St. Thomas Aquinas and the architects of the postwar planned British economy.

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Economic History; National Economies

Final Report of the United Nations Economic Survey Mission for the Middle East. Part I, *The Final Report and Appendices*. Part II, *The Technical Supplement*. (New York: Columbia Univ. Press. 1949. Pp. v, 103; vi, 74. $1.00; 80c.)

The primary reason for the inauguration of this survey was political and humanitarian, namely to find a solution for the refugee problem created in Palestine and the neighbouring countries as result and tragic aftermath of the Arab-Israeli War. But the contents of this document go beyond this immediate aim. It throws into the limelight some of the fundamental issues which inevitably face every attempt at reconstruction and development of Middle Eastern regions.

The main task of the Economic Survey Mission has been defined as (a) To

examine the economic situation in the countries affected by recent hostilities, and to make recommendations for an integrated programme of measures and development projects to overcome the economic dislocations created by the hostilities; (b) To facilitate the repatriation, resettlement and economic and social rehabilitation of the refugees and the payment of compensation pursuant to the provisions of paragraph eleven of the General Assembly's resolution of December 11, 1948, in order to reintegrate the refugees into the economic life of the area on a self-sustaining basis within a minimum period of time; (c) To promote economic conditions conducive to the maintenance of peace and stability in the area. The report of the Economic Survey Mission is divided into two volumes: Volume I contains the Final Report, the introductory chapters of which start with some pertinent remarks on the main factors dominating the economic and social scene in Middle Eastern countries. The explanation of the present obstacles to economic development leads to the central proposal of the mission to start for the time being with pilot demonstration projects. The conclusions of the mission contain the familiar references to the necessity of a rise in standards of living as a preliminary for peace and stability in the Middle East and emphasize "that the path to a higher standard of living for the population of the Middle East is a long one; that, through the efforts of Middle Eastern peoples and Governments themselves, a higher standard of living can only be achieved through the development of the natural resources of Middle Eastern countries which, to begin with, should be reflected in an improved and modernized agriculture, without which substantial industrial opportunity is denied them; that the obstacles to economic development leave few opportunities, if any, for the immediate prosecution of large-scale schemes or the fruitful application of large long-term credits for productive, self-liquidating developments."

The appendices to Volume I and the detailed agricultural and engineering sections of Volume II entitled "Technical Supplement" contain valuable information on the financial and agricultural conditions of the area and a list of development projects in the field of rural irrigation, power and transport reconstruction. The appendices describe also some individual projects for the utilization and processing of agricultural products and for the exploitation of mineral resources.

The two volumes abound in many apt remarks concerning the analysis of the existent conditions, among them the reference to the political difficulties, which for the time being prevent a regional development of river resources in Middle Eastern countries. The comments on prevailing mentality with respect to the financial "climate" should be carefully studied. Quite frequently it is forgotten that as long as interest can be obtained on private loans at exorbitant rates exceeding many times the rate of return to be anticipated from investments in public development schemes, internal financing will not be attractive. The negative effect of maldistribution of wealth and revenue on the realization of such projects is mentioned. "Except in Israel, the wealth of these countries, from which Governments derive little revenue, is

concentrated in the hands of relatively few individuals who show, at the moment, little disposition to lend their money for long-range economic projects yielding a relatively small return. Another deterrent to resident private investors is their apparent unwillingness to regard their Governments as stable and prudent custodians of public enterprise." A similar reasoning points to the inclination of local capitalists to invest their capital in gold rather than to conduct it into productive channels. The report quotes an estimate of gold hoarding of no less than 150 million dollars for Syria alone. This, incidentally, stands in some contradiction to the emphasis laid on the general state of poverty and scarcity of internal financial resources. It would have been desirable to hear the views of the Survey Mission as to the possibilities for making these considerable idle resources productive, a problem not limited to Middle Eastern countries but existing in most of the underdeveloped areas.

Though only one year has lapsed since the completion of the report, a number of observations make odd reading. That there was no progress in the resettlement of the refugees is certainly not the fault of the mission. But in respect of the wider issue of development, the attitude of the authors was too groping from the beginning. It is certainly justifiable to examine and emphasize the institutional obstacles to economic development in order to restrain naive and wishful thinking in a field where the danger of paying lip service to programs of betterment is imminent.

Yet whilst the central proposal of the Mission to start with pilot projects is important advice, the issue of development demands under present circumstances a more aggressive approach. One would have wished more drastic recommendations and a more outspoken treatment of the obstacles. Those who oppose reforms in oriental lands will be able to refer to a number of statements in the report in explaining away the possibilities for quick improvement. Other area reports, as for instance the Report of the Economic Survey Mission to the Philippines, point bluntly to the structure of vested interests when analyzing the reasons for the continued state of impoverishment and destitution. There is also a certain over-estimation of the conservative propensities of local populations. Speaking about the possible results of the introduction of time-saving machinery in the peasant's farm, the report comments as follows: "Speculation about what he might do with his leisure, if he had it, begs all sorts of controversial questions. Perhaps his children, or his children's children, will come to think differently about these things." The reviewer thinks that not only the children, or the children's children, of many farmers in Middle Eastern lands think differently about these things but also many peasants of the present day who have started to use tractors and all kinds of improved farm equipment.

The international approach to the problem of under-developed areas has considerably advanced in recent years. Since the authors of the report themselves confess that "the land and water of the Middle East, properly developed and used, can support greatly increased populations and at a higher standard of living than now prevails," we feel not entirely satisfied with the answers they have given. This final report can only serve as an "Interim Report" on

the way to a more committing and more courageous approach to the problems of Middle Eastern development.

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The Economy of Latin America. By Wendell C. Gordon. (New York: Columbia Univ. Press. 1950, Pp. 434, $5.50.)

Those who have taught courses in the economy of Latin America are painfully aware of the need for a textbook in the field. Professor Gordon has done a considerable service by bringing out this volume. He starts with two chapters which sketch in very rapid strokes the economic history of the region and the principal facts about the "population, income and allocation of productive effort," and then divides most of the remainder of his book into four parts with two or more chapters each on organization of production, the raising of capital, pricing and production control, and international trade.

A short concluding chapter is followed by forty-seven statistical tables which should provide the student with a good bird's eye view of the economy of the region. These are followed by a rather long and quite useful bibliography, probably of more use to the advanced scholar in the field than to the college student. It is stated in the introduction that the volume is intended for use by both groups.

Attention is concentrated on problems such as the raising of capital, public finance, banking, and balance of trade. There is also a worthwhile chapter on "economic imperialism," a subject upon which Professor Gordon, as the author of a study of the expropriation of foreign-owned property in Mexico,[1] is a recognized authority.

In connection with the raising of capital in Latin America, there is little or no discussion of the propensity of Latin Americans with money to invest to put their funds in land, and the changes now developing in this traditional pattern. The rôle of the government-sponsored development corporation in raising and investing capital funds is given only passing reference, though in countries such as Chile, Mexico, Venezuela and Peru it has played a very significant rôle.

There are some inaccuracies of discussion and analysis. Several instances of this can be pointed out in the chapter on "Labor and Social Security." In discussing the Mexican labor situation, Professor Gordon singles out the group who have led the Confederacion Regional Obrera Mexicana (CROM) labor federation (headed by Luis Morones) as "a group of self-seekers," and since he uses no such adjectives to describe Sr. Morones' successors, such as Lombardo Toledano and his friends, the implication is that the latter are not "self-seekers." Unfortunately, "self-seeking" seems to be a fairly prevalent characteristic of all Mexican labor leaders.

Again, Dr. Gordon indicates that the split in the Confederacion de Traba-

[1] Wendell C. Gordon, *The Expropriation of Foreign-Owned Property in Mexico* (Washington, Public Affairs Press, 1941), Chap. XII.

jadores de Mexico (CTM, the CROM's successor as the dominant Mexican labor group) which occurred in 1947 when Lombardo Toledano was ousted was the only important division in that organization. As a matter of fact, the CTM had been disintegrating since 1942 at least. In addition, Professor Gordon is entirely wrong in his estimate that Lombardo Toledano's successor to the CTM, the Alianza de Obreros y Campesinos de Mexico, was likely to become the principal labor group in the country.

In a wider labor field at least two of Professor Gordon's comments might be questioned. He says that the only labor federation in the continent which has been "dominated by avowed Communists" is the Cuban Confederacion de Trabajadores de Cuba (CTC). In this he is mistaken: important labor federations in Uruguay, Chile, Colombia, Costa Rica, Brazil, to name but a few, have been controlled by avowed Communists. The continent-wide Confederacion de Trabajadores de American Latina (CTAL) has since 1944 had a majority of avowed members of the Communist Party in its executive committee.

Finally, in discussing the Inter American Confederation of Workers (C.I.T.) which was organized in 1948 under A.F.L. sponsorship, Professor Gordon says that the groups which had formed the Pan American Federation of Labor in the 1920's were active in the C.I.T. This is not so, since the only group which belonged to both is the A.F.L. itself. The principal Latin American group in the P.A.F.L., the Mexican CROM, is strongly antagonistic to the C.I.T. and is indeed friendly to the Peronista labor movement. There is, incidentally, no mention of the part the Peronistas are playing in Inter-American labor relations.

In spite of these criticisms, this reviewer is convinced that Professor Gordon's pioneer text will be met with great relief and approval by teachers of Latin American economics. For the first time a general picture of the economy of Latin America has been brought together in one volume written in an easy and readable style.

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Economic Systems; Planning and Reform; Cooperation

The Open Society and its Enemies. By KARL R. POPPER. (Princeton: Princeton University Press. 1950. Pp. xii, 732. $7.50.)

This book—originaly published in England in 1945—is essentially a philosophical plea for the democratic way of life and for piece-meal intervention, preceded by discussion and consent, as the only satisfactory method of social betterment.

". . . Our greatest troubles," says the author, "spring from something that is as admirable as it is dangerous . . . our impatience to better the lot of our fellows." This dangerous impatience finds expression in the philosophies of Plato and Marx. These systems assert that history follows a fixed law and inexorably proceeds toward a fixed destiny. They hold up before men's eyes a prophetic vision of an approaching earthly paradise, a millennium in which

an entirely new social system will sweep aside the one we now have. Then and only then will suffering end and justice at last come to pass. In these philosophies, therefore, there is no mood of toleration, no room for democratic compromise, no possibility for gradual amelioration by specific rational action. Instead, man is in the grip of ineluctable and irrational forces. His one opportunity for a responsible moral choice is to cooperate with the law of history itself, and so to hasten the climacteric.

General acceptance of this kind of thinking has fatal consequences for free or "open" societies. For these philosophies involve a betrayal of freedom itself. They teach that the democratic state is impotent in the redress of injustice and suffering, and they call for its destruction and the society that goes with it. In their urge to realize some abstract "good," they demand the total reconstruction of existing society according to some utopian blueprint. Invariably the ground plan for the new order is a "closed" tribal system where the value of men as morally responsible agents counts for naught. Personal liberties, creative spontaneity, free discussion and consent are completely and ruthlessly suppressed in blind devotion to a mythical collective interest. A secular Heaven is the promise; Hell on earth is the fulfillment.

There are genuinely evil implications in these philosophies. They demand exposure and rejection. Yet liberty is often difficult to appreciate, and at times its defense may sound pedestrian and banal, or even worse, it may be mistaken for a complete rationalization of the *status quo*. As Matteotti once remarked, freedom is like the air you breathe; you only become conscious of it when the rope is round your neck.

Popper sees Plato as a philosopher who viewed change as disintegration, intensely disliked individualism, and who sought a static closed society. To understand him, one must understand his entire philosophy, its sources and assumptions. Well before Plato's own time, the Ionian nature philosophers had found change characteristic of the world of sense experience, and had interpreted processes of change biologically. Each "thing" follows an orderly sequence of birth-growth-reproduction-decay, and finally death. "Nature" was the original stuff from which all things come (animate matter plus space) and the formative principles by which like begets like and each finite thing undergoes its orderly life-cycle. Building on this scheme, Plato developed his famous dualism between the timeless order of forms (classes) and their viable copies in the world of experience. In the *Timaeus* he suggested that the form is the "father" and space the "mother" of all generated copies of that class. Extending this organic analogy, Plato constructed a metaphysics that interpreted all change in the world as processes of growth and decay, under the law of nature. Most important, Plato conceived society to be a biological organism. In consequence, he interpreted the histories of human societies as controlled by a natural law of growth and decay.

Plato's youth paralleled the later years of the lengthy Peloponnesian wars, when change was adverse to Athenian democracy. He viewed these events as a natural process of organic decay in the Athenian social organism—a process whose origins he ascribed to the individualism of the Periclean Age. The central problem of his political speculations was the formulation of a scientific polity

—a set of principles for statecraft that would restore the social organism to health, by isolating the causes of decay which would have to be brought under political control. In his solution of the problem, each state was viewed as a living thing, belonging to its natural class. As such, it was born in the family, grew to maturity as a city-state under a kingship, and declined by successive stages through timocracy, oligarchy, democracy, and finally tyranny. This was its normal life-cycle. This actual state, however, was but a copy of the timeless ideal state, whose "nature" can only be known by rational inquiry. By a kind of dialectic or debate, one could determine the "essential nature" of this state: its origin, its proper purposes, and its general characteristics. Since this ideal state was "natural," it was also "best." The aim of scientific politics, then, was to rebuild Athenian society on the model of the ideal state, and so arrest the process of natural decay.

The reactionary quality of Plato's thought now becomes evident. For he found the cause of decay in the individualism of the rulers. Plato could only conceive of individualism as egoistic self-interest: it held no other possibilities for him, despite the creative greatness of the Periclean period. Individualism brought class war, which in turn incurred a series of revolutions, ending in tyranny. Significantly, Plato saw tyranny as a possible means to attain the ideal state, for a wise tyrant would have the power to reconstruct the whole of society according to Plato's ground-plan. More important, the plan made the interests of the state the supreme good, exalted the collective and sacrificed the citizen. It would be difficult to discover a more thoroughly totalitarian conception in the whole history of western thought.

Thus the scheme called for a rigid class structure, on the principle that natural inequalities among men fixed their caste status in place of their rights as citizens in a democracy. As means of control, the rulers were to use systematically applied force—including murder, imprisonment and exile. There were to be censorship and strict regulation of learning and the arts according to fixed political purposes. Justice was identified with the interests of this best possible state. In place of equality before the laws, there was a system of natural inequalities and a privileged class. In place of creative individualism, there was the absolute dominance of the collective interest of the state, as interpreted by its privileged rulers. The state was not an instrument for the protection and promotion of the liberties and legitimate interests of the citizens. Rather, the state was an end in itself. All this, of course, was necessary to achieve an abstract good, as defined by Plato himself.

From Plato, Popper proceeds through Aristotle and Hegel, and follows with an extensive consideration of Marx. Though he sees a close affinity between the systems of Plato and Marx, Popper fails to emphasize the recurrence of the organic analogy in Marx or its rôle in his conception of society and its natural course of change. Moreover, Popper believes that Marx, unlike Plato, really was on the side of freedom and the open society, though his teaching furnished a weapon of great power to the enemies of that society.

In common with Plato, Popper argues, Marx too believed that history moved according to a fixed law, and that the good society required a sweeping change in the social order. Like Plato's, Marx's teaching was pernicious

because it narrowed the scope of moral choices and discounted the value of reforms by piece-meal democratic methods. The mode of economic production evolved according to an unchangeable course. Its inexorable advance meant increasing misery and increasingly bitter class conflict. The socialist millennium was not only inevitable in the end; it was the only alternative to existing society. To hasten this millennium, rational men had but one possibility: to promote class conflict until it ended in revolution, probably with violence. Any act was justified if it served the end.

The simplicity of this formula shows how Marxism is an attack upon free society. Marx left no room for the correction of injustices by democratic methods practiced within the framework of an existing liberal order. All that he could see was inevitable class war and an approaching Great Year when existing Society would be totally destroyed. Marx's failure, his real disservice to the cause of freedom, lay in his attempt to make historical prophecy the aim of the social sciences. To asssume that history followed a fixed law is to deny to men the possibility of making their own history on the basis of their own responsible acts. Human liberty and democracy become a façade for the realities of class domination. So they must be overthrown.

Popper believes that Marx was most successful in his descriptive analysis of *laissez-faire* capitalism. He was sound in his view of "exploitation" (undefined) and the reserve army of the unemployed in that system. But his vision was limited, for he saw no alternative to *laissez-faire* save the socialist revolution. Yet in Popper's view "democratic intervention"—collective bargaining, social legislation and counter-cyclical spending—have shown that there is an alternative. Failure to glimpse it led Marx into his dolorous and mistaken predictions regarding the general consequences of accumulation. Popper also finds Marx's value theory unessential to his view of the reserve army. His emphasis upon the economic factor in history was no more than a "valuable suggestion," while his class hypothesis was overstated though useful in the analysis of *laissez-faire.*

I have the following points to make regarding this book. First, Popper has made an impressive contribution to scholarship in bringing into the open, with ample documentation, the assumptions and weaknesses of these philosophical systems. He has undermined their elegant pretensions, and a careful reader can gain much from Popper's labors. Of equal merit is Popper's elaborate demonstration that these systems contribute to the irrational destructiveness of the times. Plato and Marx have strong appeal, for they seem to minister to the natural desire to do good for humanity. In the case of Marxism, the appeal is even stronger in our day, for Marx labelled his system "scientific." Popper explodes this notion, by showing how Marx merely reasserted the ancient tradition of prophecy.

Second, Popper has marred his exposition by repeated failure systematically to develop the argument. I found myself constantly distracted by his practice of interrupting the main analysis to make lengthy explorations of side issues. In some of these diversions, Popper found frequent opportunity to engage in extensive and unnecessary self-justification for having found that some of our intellectual gods have feet of clay. In addition and perhaps because he is a

philosopher, Popper has a faculty for making clear ideas obscure by excessive use of unfamiliar technical terms and neologisms. If the purpose is to reach a broad audience, these weaknesses in the exposition as a whole will seriously injure the market.

Third, the argument would have been immeasurably strengthened if Popper had found occasion to develop explicitly the hostile consequences of Marxism to open societies. After all, Marx may have intended to reach freedom by his peculiar route, but if so, his ideas have had strangely contradictory results in the derivative teaching and practice of Lenin and Stalin. The space Popper devotes to the sociologists of knowledge and to Toynbee might well have been used to develop this point. And a fertile comparison could easily have been drawn between Plato's closed state and the realties of the Soviet dictatorship after 1917. Here we have powerful evidence that Marxism in practice leads to the closed society, and so represents an incredibly dangerous idea today.

Fourth, Popper's conception of intelligent action within the open society is not too clear. He properly insists that the democratic state must "intervene," but he does not show in any concrete way what kinds of intervention are compatible with the survival of a liberal organization, and what kinds are not. Yet some forms of democratic intervention—if systematically pursued and cumulatively expanded—can end in the closed society Popper abhors. The author fails to make clear that an open society requires coordination by prices "in the main," and cannot be maintained even under democratic political forms if state coercion is largely to replace the price system, even if the coercion is to serve "good ends." Further, Popper places his faith in "intervention" itself. Surely there is more to the open society than this. Yet I find no recognition that it is the essence of liberal society to make available a broad domain for constructive private actions. An open society—if it is to be "open"—is primarily a civil society, and not a political society in which the state is the chief means of promoting ends.

Finally, Popper discusses economic issues in making his case, and here his judgments are open to question at some points. For example, he endorses some of the stale 19th century attacks on *laissez-faire,* and agrees with Marx that if "there is a free labour market, and a surplus population . . . then wages cannot rise above starvation wages." Hence Marx was "justified in predicting increasing misery under that system." Next he contends that Marx's correct prediction was set aside by the rise of interventionism. This means two things: one, that real incomes of wage workers in England had shown no improvement until the period of intervention had begun (1870?); the other, that the only way to raise real wages is through intervention, mainly state. Now it is one thing to say that real incomes were low before 1870, another to suggest they had never increased. More important, the notion that only intervention can raise real wages is entirely too narrow a conception of the capitalistic process. Even if correct in special cases, it suggests that the only way to raise real wages is to raise the money supply price of labor. A reversal of emphasis is badly needed. The capitalistic process works mainly through the side of demand for labor, achieving improvements in mass living standards by pulling up money wages relative to prices of wage-goods, while secondarily

reducing the prices of wage-goods. As Schumpeter untiringly contended, the rise of living standards after 1870 was due to the amazing performance of "the capitalist engine" itself, and not to interference with its markets. Popper is correct in recognizing the short-run relapses associated with the system, and in calling for methods of stabilization of the growth rate. His difficulty lies in a failure to see the process as a whole.

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The Vital Center. By Arthur M. Schlesinger, Jr. (Boston: Houghton Mifflin. 1949. Pp. 8, 274. $3.00.)

This is a curiously schizoid volume uniting in about equal proportions brilliant and authoritative insight with confused and superficial cliché. Dr. Schlesinger, in fact, speaks with two voices. With one he gives a critical analysis of communism generally and Soviet Russia in particular. Here the analysis is clear, manly, and straightforward. The author has evidently battled his way to his conclusions and every line shows the evidence of hard thought. The dissection of communism occupies (though not consecutively) about half the book, and this reviewer thought it excellent.

But (as we are so often exhorted today) it is not to be *against* something, we must also be *for* something. And when Dr. Schlesinger speaks on specific positive proposals his voice undergoes a curious change. Though the style remains superficially as confident as ever, the state of mind of the author somehow indefinably affects the cadence of the prose. Schlesinger in these sections has thrown together a number of ideas not always well assorted and often clearly the result of hasty borrowing. The true ring of authentic *personal* conviction is lacking.

Economists in particular will be impressed by the thinness of the constructive analysis. Dr. Schlesinger comes nearest to giving a specific program in the last half of his eighth chapter, "The Revival of American Radicalism," and there he has taken over the idea that "Keynes not Marx is the prophet of the new radicalism." "The state . . . should create an environment favorable to private business policies which increase production; and let the free market carry the ball as far as it can." Few would object to this statement. But it would puzzle anyone to determine from the confused and contradictory pages which follow (pp. 183-85) whether Schlesinger is merely a moderate Keynesian of the compensatory finance, balanced-and-unbalanced budget variety like this reviewer, or an advocate of the Beveridge heavily centralized, over-all planning scheme, or a gradualist of the socialist, government-ownership-of-heavy-industry type.

Perhaps it is unfair to ask of an historian that he supply us with an economic and political blueprint. But Dr. Schlesinger has voluntarily undertaken the task of charting a general policy for democratic action. Furthermore (to his honor), his book is replete with indications that a merely political analysis of the roots of freedom is not enough (just as an economic analysis is not enough). There is an old proverb that he who says A must say B, and I feel that Schlesinger's own *political* analysis puts him clearly under an

obligation to analyze his economic program every bit as carefully, as personally, and as bravely as he analyzes communism. This, unfortunately, he fails to do and the book is correspondingly weakened.

But let us cut through detail and ask what it is which fundamentally prevents Schlesinger from evolving any coherent positive policy. He grants that excessive centralism will tend to undermine freedom of thought and effective democracy. He grants the need for growth and for some large units (though he is clearly haunted by distributivist and guild socialist echoes). He grants that the "organization" can take on a life and interests of its own, separate from those of its rank and file, and sometimes adverse to them. He grants that labor unions can act restrictively and oppose change and opportunity. Yet somehow the cumulative effect of all these concessions—which, I submit, should lead him toward the sort of liberal capitalism sketched in the reviewer's *Democracy and Progress,* is never quite followed through. What is the trouble?

This reviewer has often considered writing an article to be entitled "Jefferson, Hamilton, and Marx." My thesis would be that in the last analysis Marx and Hamilton have certain qualities in common as against Jefferson. For Marx and Hamilton—not necessarily explicitly or consciously—are to some extent sharers of the Platonic dream of the rule *downward* of the guardians, or the philosopher kings—in other words paternal oligarchy. The Leninist-Marxist emphasis upon the guardianship of the party, the Hamiltonian concept of government by the "responsible" men, right-wing or left-wing *noblesse oblige,* these ideas I submit have a certain basic common element.

But although Dr. Schlesinger is too keen and too many-sided to be neatly pigeon-holed he remains, I submit, essentially a Hamiltonian radical with a rather stronger dose of Marxian ideas than I believe he either realizes or exactly intends. And strongly influenced by the ideal of the philosopher-king, he simply cannot "take" the businessman. The only type of conservative that he can tolerate is the second- or third-generation rentier! And (though here I am probably over-stating) the type of corporation he seems to find it easiest to assimilate is the large-scale rationalized, routinized "responsible" vested interest!

Most remarkable of all, for a believer in democracy, is his frequent, almost rabid antipathy to the *new* rich, the parvenue, the very type whose existence a Jeffersonian would regard as one of the prime achievements of democracy. Desperately compressing the argument, there seem to me to be two basic weaknesses in Schlesinger's point of view. First of all, on the purely economic side, his preoccupation with the Marxian type of class struggle—*horizontal* conflicts between the "wealthy" and the "poor"—leads him almost entirely to omit the *vertical* group struggles of industry against industry, technique against technique and the inevitable psychic insecurities which they imply. Thus he never fully grasps the clash of progress and security—a clash which may be ameliorated but never removed.

The second basic weakness is the almost complete omission from his set

of ideas of *independent* opportunity. He would do much to give opportunity —health services, free education and so on. The poor boy who wanted to be a physicist might indeed get a better break in Schlesinger's world *at first*. But the poor boy who, having learned physics, then wishes to see some great *new* invention or scientific discovery *put into practice* will probably tell another story. For the flaccid, security-conscious, vocational pressure groups likely to emerge in the Beveridge-type world are not likely to permit of much real change or adventure. To paraphrase Schlesinger, they are likely to be bureaucratic in a "soft" way, "sedate, cautious, and feeble." Or could they merge into fascism?

This review must not be taken as a blanket indorsement of whatever type of man the market happens to throw up. I have on the contrary (pp. 87-88 of my *Democracy*) analyzed at some length the problems which the parvenue raises for the intellectual—space forbids repetition here. But, speaking briefly, I also cannot share Schlesinger's very heavy reliance on *noblesse oblige*. Can we get the *oblige* without re-creating the *noblesse*-responsibility without power? That, as I see it, is his basic problem.

This book contains a number of inconsistencies or errors. For example, on page 25, we are told that "aristocrats" are people whose position derives from "*land and status* rather than from stock holdings." But such "aristocrats" only exist in Boston, Philadelphia, New York, and Virginia. Is the Main Line, then, or Fifth Avenue divorced from the stock market?

The Whig party "bitterly fought the . . . regulation of wild-cat banking" (p. 17). One looks in vain for a mention of the fact that the Whigs were *organized* to protect the Bank of the United States. Wild-cat banking got its great impetus from Andrew Jackson!

Finally " 'The businessman dealing with a large political question' [Henry Cabot] Lodge [Sr.] could say with Bostonian and Hamiltonian disdain is really a painful sight!" (p. 21). I should say that the spectacle of Henry Cabot Lodge, Sr. confronted with the "large political question" of the League of Nations was about as painful a sight as most. And does the businessman show up so badly by comparison?

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Movements for Economic Reform. By Philip Taft. (New York: Rinehart. 1950. Pp. xiv, 614. $5.00.)

The bitter showdown of ideologies in our period centers around economic systems and their underlying philosophies. Professor Taft endeavors to offer a view of various movements for economic reform against their historical and cultural background. "Only by examining the customs, traditions, and history of a country can we account for its acceptance, rejection, or modification of a doctrine" (p. viii). This is a very commendable approach indeed; it is regrettable, therefore, that this intention is not applied more consistently throughout the book. The promise to "avoid, in considering programs of reform, the smugness of the logician who believes that proof of a logical con-

tradiction or inadequacy is fatal" (p. 2) is more successfully kept, but a cleancut distinction between individual ideas—no matter how important—and socio-economic movements is sometimes missing in presentation.

The author starts out with Plato, then makes a big jump to More, Campanella, Harrington, and Winstanley, whom he groups together as "the first Utopians." The following two chapters are concerned with the development of socialist ideas in the eighteenth and early nineteenth centuries. An account of Marxism and anarchism follows. From there on the bulk of the book (Chapters 8 to 24) is organized in national units. Each nation discussed receives one or more chapters in which its socio-economic movements are reviewed historically. This procedure is applied to Germany, Austria, France, England, Sweden, the United States, Russia, and Italy; for some reason the discussion of Belgian reformism and Spanish anarcho-syndicalism is placed in the Appendix. The last eight chapters deal with movements which do not quite fit into this pattern: Christian socialism, "reactionary socialism" (particularly in Germany), the various labor Internationals, economic planning, and cooperatives.

The organization of ideas and movements in national groups has certain advantages for teaching purposes, but it is likely to confuse some students and to obscure the general picture of a given period (especially the earlier ones, which are treated very briefly). The reader who follows the present layout of the book is offered an account of the New Deal in Chapter 18 only to be thrown back to the Russian Decembrists in the following chapter. Certain movements of international character and significance are thus chopped up into national sections. Especially is this true of fascism, which the author does not recognize as an international phenomenon at all; he treats Italian socialism and fascism in one chapter, while setting apart German National Socialism in a special—rather fragmentary—section toward the end of the book. The reason given is that "Italian fascism, unlike Nazism, must be regarded as an aborted offspring of socialism, because it was closely linked to syndicalism, which was itself part of the socialist current" (p. 402). Later it is asserted that "fascism was naked adventurism" (p. 414), though we are told elsewhere that Italian fascism, as distinguished from German National Socialism, "can be traced to Marxism" (p. 458). Marxism, on the other hand, is treated by the author with great care and critical understanding, and is certainly not interpreted by him as adventurism.

In this reviewer's judgment, the lack of an analytical and integrated treatment of fascism as a contemporary international phenomenon (with varying details according to the background of each nation affected) is one of the two major shortcomings of the book. The other one is its limitation to European movements and ideas, with the exception of two chapters on American radicalism and the New Deal, and a few paragraphs on communism in China and collective villages in Palestine. Indigenous movements for economic reform in such areas as Asia or Latin America are not even mentioned, though India and Mexico, for example, offer ample opportunity to study interesting currents. Such expansion of the discussion, it is true, could be achieved only at the cost of an increase in the length of the book, but it would seem to be important

in order to offer to the beginning student a more balanced account of intellectual developments in the world. It is surprising also that a book published in 1950 does not offer a more systematic discussion of postwar developments, particularly in the labor movement.

A number of inaccuracies of lesser importance could easily be eliminated. For example, William I was not German emperor at the time referred to on page 63; to call the Austrian *Christlichsoziale* Christian Socialists is certainly misleading; and the whole concept of reactionary socialism as used in Chapter 26 is very dubious. The publishers could make a contribution by eliminating in future editions the countless printing errors and, in particular, the constant misspelling of foreign-language names and titles.

These criticisms are not meant to minimize the considerable merits of the book. It has a much wider scope than many conventional books and courses on comparative economic systems, for it places the emphasis on movements and ideas while paying due attention to those older programs which have been translated into institutional reforms. The author is very anxious to do justice to every variety of reformer, and most of his judgments are fair and levelheaded. The book is very readable and its style is clear, though the reader is occasionally left in some initial doubt as to where the reporting of other people's ideas stops and where the author's own views begin. This applies, for example, to the chapter on economic planning, which otherwise is a valuable part of the book. It is debatable, of course, whether economic planning as such represents a "movement" and whether we should not distinguish carefully between the various possible types, roots, and approaches concerned.

Generally, the author seems to confine himself largely to reporting in the beginning of the book and to add an increasing amount of critical evaluation and personal opinion later on. His own sympathies in the current showdown of reform ideas are clearly with the reformist and gradualist kind of social-democratic movements such as the British and Swedish. He takes the revolutionary phraseology of the communist parties skillfully apart and analyzes interestingly the conversion of the original Marxian ideology into the power drive of a dictatorial government. He shows a fine understanding of the mental processes that induce some Westerners to seek peace and salvation in a blind belief in the Soviets; he might have added a discussion of that peculiar figure, the ex-communist, who is also becoming a kind of movement these days. The final chapter is perhaps more in the nature of a good magazine article than an analytical conclusion, but it offers some wise words which deserve attention. "If we are to retain faith in democracy and reasonable progress, doctrinaire revolutionism as well as doctrinaire reaction must be avoided. The thorough-going laissez-faire economist is a brother under the skin of the Marxian dogmatist, and both by their irrationality, unrealism, and stubbornness are the bellwethers of disaster" (p. 558).

Not only economics but sociology, psychology, and anthropology show growing interest today in the roots and effects of social reform movements. What are the comparative incentives in various economic systems and what is their relationship to the traditional assumptions of economic theory? What makes an individual a reformer, or a revolutionary? What economic, historical,

or cultural conditions increase the incidence of such malcontents sufficiently to result in a movement? Although the United States, like other countries, has a long history of reform ideas and movements, the long absence of ideological commitment in her major political parties and labor organizations has contributed to the widespread fear and suspicion toward any questioning of the socio-economic *status quo*. In presenting the long and fascinating story of economic reform movements, Professor Taft's book is welcome as a starting-point for an intelligent discussion among economists and others of the fundamental issues involved.

Albert Lauterbach

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Money and Banking; Short-Term Credit; Consumer Finance

History of the Bank of Ireland. By F. G. Hall. (Dublin: Hodges, Figgis & Co. Ltd. Oxford: Blackwell. 1949. Pp. viii, 429. 18*s*.)

The volume under review is a students' edition of Dr. Hall's *History of the Bank of Ireland 1783-1946*. The original edition was "a de-luxe volume issued by the Bank and, in addition to my history, it also contains chapters on the architecture of the Head Office building and other material of a non-economic nature."[1] The present volume is, however, a reprint of the historical part of the deluxe edition and contains all of the appendices of the latter. As a result, the book has an unusually fine format for an inexpensive volume.

As a matter of fact, Dr. Hall's study is much more comprehensive in scope than its title might indicate. It is really more of a history of the Irish banking and monetary system during the years in question. Inasmuch as the Bank of Ireland, for the major part of this period, occupied a position somewhat akin to that of the Bank of England, a detailed study of the institution necessarily includes a treatment of the Bank's relation to the private and joint stock banks, as well as to currency problems and relations with the Bank of England, thus broadening considerably the scope of the study.

Chapter I furnishes a background for the study, dealing with banking and currency conditions in Ireland before the establishment of the Bank of Ireland in 1783. Chapter II is concerned entirely with the early years of the Bank (to 1800), describing the establishing act, charter and by-laws, directors and staff, premises, commercial operations, and relations with the government. Chapters III-V, dealing with the period to 1845, are topical in nature, treating of Problems of the Currency, the Coming of Competition, and the Control of Credit. Chapters VI-VIII deal with chronological periods, the mid-Victorian (1845-1880), progress from 1880 to 1914, and the War (World War I) and its aftermath. A final chapter, entitled "Epilogue" treats, much more briefly, the period from the mid-'twenties to 1946. This is followed by thirteen appendices containing certain important correspondence and much statistical and factual information, as well as a bibliography.

[1] Quoted from a letter from Dr. Hall to the editor of the *American Economic Review*.

Although the Bank of Ireland held the government deposits and generally took responsibility for assisting other banks in time of stress, it was never given a complete monopoly of note issue, sharing the issue privilege with five other banks. Each of the six banks had an authorized issue, above which notes could be issued only when backed by specie. This arrangement was similar to the fiduciary issue of the Bank of England except for being shared by six banks instead of concentrated in one.

To the reviewer, the chapters (IV and VI) dealing with the coming of competition and the mid-Victorian period were of great interest, particularly in comparison with American banking development. The problems of small notes, private token issues (shinplasters), excessive note issues, etc., so familiar to students of American banking history, had their counterparts in Irish monetary and banking developments.

One outstanding case of fraudulent activity is also included in Irish banking history. This was concerned with the activities of one John Sadleir and the Tipperary Bank. To quote the author, "after his death, the entire story of Sadleir's frauds and forgeries came to light. He had used almost the entire funds of the Tipperary Bank in speculation in German coal mines and Californian gold ventures, and his personal overdraft amounted to £200,000. When this source of supply was exhausted under the cloak of his position as Chairman of the Royal Swedish Railway, he forged 20,000 share certificates and 12,000 obligations of that concern. These forgeries were estimated to have totalled £300,000, and, in addition, he was indebted to that company to the enormous extent of £346,000. It was found impossible to estimate the total amount involved in Sadleir's forgeries of title deeds. He had forged an enormous number of title deeds covering properties in Ireland. . . . He also issued false deeds respecting properties in Great Britain, America and the Continent, but the total extent of these forgeries never came to light" (p. 229).

Fortunately for the people of Ireland, the case of John Sadleir was an exception. Although losses were suffered as a result of banking difficulties, outright fraudulent activity on a large scale seems to have been confined pretty largely to the instance just described. The Bank of Ireland itself conducted its affairs with the utmost probity throughout its entire existence.

Since the establishment of Eire, the Bank of Ireland has served as government depository for both Eire and Northern Ireland. It, along with the other five banks previously noted, still has the issue privilege, but the newly established Central Bank of Ireland (1942) is to be the sole note-issuing power after 1956.

The Bank of Ireland has been of outstanding service to the people of Ireland for more than a century and a half. Under the circumstances, it would seem to the reviewer that it might well have been made the central bank instead of establishing a new central institution. Perhaps, however, in these days of government control of central banks, the Bank of Ireland would prefer the less trammeled rôle of a leading commercial institution.

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Business Finance; Investments and Security Markets; Insurance

Modern Life Insurance. By Robert I. Mehr and Robert W. Osler. (New York: Macmillan. 1949. Pp. xiii, 769. $5.00.)

This textbook may be properly classified in the same group with those of Huebner, MacLean and Magee. As a fourth book in the list of those at the college level, it covers essentially the same topics as the other three but at a slightly different degree of difficulty. Together, they present the field as far as college textbooks for the first course in life insurance are concerned. The book under review is not designed to be technical, but rather to be descriptive and to whet the interest of both college students and underwriters in the field, or others who wish an introductory understanding of life insurance on a rather broad basis. This book is by no means as technical nor compact as the one by MacLean; nor is it as detailed in the sections relating to premium and reserve calculation as that by Huebner. Conversely, relatively greater attention is given to needs for life insurance for a variety of purposes.

The organization is logical and attractive in that the subjects likely to be of most interest to the reader are introduced first and then more general and in some cases less "practical" problems in life insurance are introduced later. Following the Introduction, there is a section of seven chapters on "The Product" which includes a discussion of life insurance and annuity contracts, legal features, and a description of both industrial and group, life and pension plans. The next section on "The Cost" includes a technical discussion of the selection of risks, the computation of rates, and a discussion of reserves and reserve systems, followed by financial management problems from the company point of view.

The section on "The Market" is concerned with individual, family, business, and estate needs for life insurance and the ways in which various types of contracts can be fitted together to meet these needs. This section is likely to be of considerable interest to the typical student and prospective agent, since it emphasizes family problems and methods of arriving at a solution. Several illustrations of estate tax planning are introduced in this section.

Part V, on Life Insurance Companies, is concerned with types of carriers and their differences, followed by a consideration of home office and field organization. The final section on "The Life Insurance Industry" contains some material that is more frequently found in introductory sections of textbooks, such as the size and scope of the industry and its historical development. The regulation of the life insurance industry and the social values of life insurance complete the presentation.

Throughout the text the vocabulary of the trade is used, including abbreviations that by custom are used as complete words. In addition, a glossary of life insurance terms is included.

Generally speaking, the book is well written and is very readable; hence, it is likely to be teachable. The approach is deliberately non-technical. Some of the more difficult and controversial points are either omitted entirely or treated lightly. Here and there are definitions that may be accepted for classroom discussion, but may be considered incomplete for more philosophical

treatment. For example, social insurance is differentiated from private insurance largely on the grounds of the compulsory nature of the former. Some people would insist on a more complete differentiation and would consider this one inadequate or at least incomplete.

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Public Finance

Public Finance. By ORVAL BENNETT and ISAAC LIPPINCOTT. (Cincinnati: South-Western Publishing Co. 1949. Pp. x, 728. $4.25.)

This is one of a number of public finance texts that have appeared in recent years. Unlike most of the others, however, it appears to have been written in terms of a specific educational objective. It is rather definitely pitched to the undergraduate level of instruction, and, apparently, is intended to meet the particular needs of the student whose interest in the subject is non-professional and non-technical. The language of the book more nearly approaches that of an elementary economics text, and the subject matter is developed descriptively to a somewhat greater degree than is characteristic of this type of material.

According to the authors, "The subject matter of public finance has undergone such great changes in recent years that a new approach seems necessary." This is because "Vastly greater emphasis is being placed by government upon the economic effects of public expenditures and taxation as means of control." From the standpoint of developing the text material, it also means that the writers, who are both orthodox economists, have undertaken to graft elements of Keynesian economics onto an essentially traditional treatment of the subject matter. Such attempts at synthesis seldom succeed where integration is needed, although the results in the present instance are probably as successful as any that can be achieved under the circumstances.

The writers state that "Special emphasis has been placed upon general principles and upon the fiscal theory of the state, with less attention to mere detail and current data." By actual count, approximately 13 per cent of the page matter in this volume is devoted to statistical representation and teaching aids, with a substantial portion of the remainder in direct quotation, this frequently in small print. While this reviewer has no quarrel with those who seek to enrich their teaching materials with judiciously chosen statistical data, quotations from selected sources, and supplementary review and research questions and problems, he doubts the advisability of loading an undergraduate text with items that are too often dated or that do not necessarily reflect the views of current authorities. From this standpoint, the book would have been much more effective had it been more closely and directly written.

The authors recognize a possible danger which may shorten the useful life of any current text in a field as dynamic as modern public finance, but do not meet it, when they employ the device of drawing a line of demarcation between pre-1939 fiscal history and post-1939 developments. This procedure

is defended on the ground that the years immediately preceding 1939 ". . . represent the last normal periods of government finance before World War II," while "The budget periods from 1939 to 1947 were emergency years." Yet, the history of public finance has as much continuity as any other history, and to treat it otherwise is to do violence to its nature.

The text material has been organized on the theory that "The subject matter of public finance falls rather naturally into five great divisions." These are public expenditure, financial administration, public debt, the bases of taxation, and government income. Tax writers generally include the topics treated under bases of taxation as elements in the study of government income, in that they represent, for the most part, the non-administrative aspects of that theme.

The volume devotes somewhat more space to fiscal administration than is usually allotted to this factor, while public debt is likewise treated with a degree of completeness not common to books of this type. The treatment of taxation, however, is rather uneven. Although the space accorded major taxes on personal income and property is generous and the descriptive matter is competent, not all important aspects of either tax have been equally well developed. Social security taxation, rather inexplicably, is dealt with under the general heading of fiscal administration, while severance taxes and the taxation of natural resources are regarded as elements under the heading of administrative and non-tax revenues. In the light of its significant emergency rôle, excess profits taxation could well have been subjected to a somewhat more penetrating analysis than the authors have seen fit to give it. Consumption taxes, in spite of their countercyclical aspects, are likewise dealt with rather casually.

Although the authors state that they have taken advantage of ". . . the vast pool of information on state finance . . . ," they fail to make specific acknowledgment of their dependence upon such sources in more than a few instances. Moreover, they have confined their list of collateral readings for the student almost entirely to the more widely read textbooks in the field.

In summation, it may be said that, while this text has a number of defects, it treats the subject of public finance comprehensively and with considerable skill. It is fairly well balanced and should meet the needs of students who are more interested in obtaining a general knowledge of the field than they are in the niceties of professional treatment. The book is particularly adapted for use in institutions with limited library facilities where instructors are frequently unspecialized in public finance.

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International Economics

The International Economy. By P. T. ELLSWORTH. (New York: Macmillan. Pp. xx, 922. $5.50.)

Professor Ellsworth's principal objection to most textbooks in the field of

international economics (including his own *International Economics*, published in 1938) is that they do not devote enough attention to the historical development of the world economy. As a result, he argues, students whose reading in this field is confined primarily to these books do not acquire an adequate understanding of either current international economic problems or the relevant economic theories.

In *The International Economy* Ellsworth shows how the international economic problems of each era, beginning with the age of mercantilism, furnished the stimuli for the development of economic theory. This he accomplishes primarily by alternate doses of theory and history. Accordingly, he begins with four chapters that are an account of the world economy from "mercantilism to laissez-faire." Next come four chapters on what Ellsworth calls the "problem of trade." Part III contains a discussion of the international gold standard and the balance of payments together with some analyses of economic conditions and institutions in Great Britain in the early 1800's. Part IV consists of six chapters on world economic developments between 1870 and 1939—the theme being the decline and collapse of the world economy. This is followed by a section titled "The Theory and Practice of a Disorganized Trading System" which includes the theory of exchange rates under inconvertible paper standards, bilateralism and other forms of foreign trade control. The problems of post-World War II reconstruction, international disequilibrium, economic development, the European Recovery Program, the International Monetary Fund, Bank, and Trade Organization are examined in the last eight chapters.

The historical material is well selected and skillfully presented. With great economy Ellsworth has sketched the features of world economic development pertinent to his treatment of theory. He has also succeeded in providing the necessary background for his discussion of postwar problems. His interesting analysis of the improvement of backward areas, for example, is indebted to his account of pertinent economic history. Though some will quarrel with Ellsworth's selection or interpretation of facts, I believe there will be general agreement that his historical analysis contributes to the understanding of both economic theory and current international economic problems.

The extensive attention to history, however, is not, as some might fear, at the expense of a sound treatment of theory. Important advances since 1938 have been combined with a carefully pruned and revised selection from the rigorous theory section in his *International Economics*.

For the most part, Ellsworth explains theory clearly. There are lapses, some minor but annoying, and others of greater importance, that mar an otherwise competent job. An example of the former is the omission of the second figure beyond the decimal point in his reproduction of one of Machlup's tables illustrating the effect of an autonomous increase in exports upon domestic income (p. 344). The result is that the table, as copied, does not balance out as it should. This will confuse the student. A proofreader's error below on the same page does not help matters. Here a minus instead

of a plus sign appears in the denominator of the multiplier formula. Another minor matter is his careless use of the terms "demand" and "supply." This leads him to say, for instance, "As a country becomes richer and as its more pressing needs for capital are met, supply tends to catch up with demand, and the rate of interest to fall" (p. 194).

At least one instance of a major expository slip should be noted. In his introduction to a discussion of changes in foreign exchange rates as a means of correcting a deficit in the balance of payments, Ellsworth says: "Changes in demand and supply in the case of a commodity result in a change in price, and this change in price brings adjustment to the altered conditions. With an increase in demand, price is raised; at the higher price, additional supplies are called forth, demand is restricted and demand and supply are brought into equilibrium at the new price. The new equilibrium will be stable (under competitive conditions) if one requirement is met: at any higher price, supply must exceed demand; at any lower price, demand must exceed supply[1]" (p. 555).

The unfortunate wording of the second sentence in the above quote will no doubt cause some readers to wonder how an increase in demand can lead to its own restriction. But the last sentence will probably be more bothersome. In the foreign exchange market, as Ellsworth shows, the supply curve may be negatively inclined. When this occurs, his stability condition is satisfied provided the supply curve cuts the demand curve from above. But, under certain assumptions of market behavior, this equilibrium is unstable in a downward but not upward direction. When, instead, the negatively inclined supply curve cuts the demand curve from below, Ellsworth's stability condition is violated. Here, however, the equilibrium may be regarded as unstable in an upward but not downward direction. A clear statement of his conception of price-quantity reactions in the foreign exchange market would have eliminated most of the misunderstandings that will arise.

Lapses such as those noted are rare. They stand out sharply because of the generally good quality of the exposition. And Ellsworth's clarity is not achieved by avoiding difficult matters. He discusses, for example, the use of offer and home-production ratio curves in the determination of the gains from trade, and J. J. Polak's analysis of balance of payments problems of debtor countries.

In sum, this book is a worthy successor to *International Economics*. It is thoroughly up-to-date. The selection of theoretical and institutional topics, though not as inclusive as some would wish, will nevertheless make this book useful to a wide variety of courses in international economics.

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Business Administration

Taxable and Business Income. By DAN THROOP SMITH and J. KEITH BUTTERS. Fiscal Policy Series, No. 2. (New York: National Bureau of Economic Research. 1949. Pp. xxvi, 342. $4.00.)

Effects of Taxation: Inventory Accounting and Policies. By J. KEITH BUTTERS, assisted by POWELL NILAND. (Boston: Harvard University, Graduate School of Business Administration. 1949. Pp. xvii, 330. $3.75.)

The central theme of both these volumes is the interrelation of tax law and business income and cost accounting. *Taxable and Business Income,* although broader in coverage since it covers the whole range of income reporting, confines itself generally to one important question: What are the differences between reported book profits and taxable income? *Inventory Accounting and Policies,* while dealing primarily with the much narrower issue of methods of inventory accounting discussed briefly in the former volume, is concerned with a much wider group of questions, ranging from an examination of the facts to the broad economic implications of different methods of inventory accounting. Thus, the two volumes are complementary and both make useful contributions to the literature. Both volumes are part of a series, the former, the second in the National Bureau's "Fiscal Policy Series," the latter, the first in a comprehensive series planned by Harvard University on the "Effects of Taxation." One minor point: although both volumes have overlapping authorship, there is a distinct difference in the writing. The former is written in the desiccated style so characteristic of much of the National Bureau's publications while the latter is marked by liveliness and readability.

Taxable and Business Income is divided into two parts: the first section is devoted to a description of the legal requirements in the calculation of taxable income and to a comparison with business customary practice (or practices). While no new ground is broken in this part, the reader is provided with a useful summary of the differences and similarities as of the time of publication. The study points out that the major conceptual divergences arise out of: (1) timing with respect to income and cost items; (2) the use of direct surplus charges and credits; and (3) legislative action to provide special treatment for certain types of income such as . . . "the extraordinarily generous discovery-value and percentage depletion allowance" (p. 21). In general, however, the similarities between the two are much greater than the differences. This is so because tax law has started from accepted accounting practice and has influenced it.

The second part breaks new ground. It deals with a measurement of the quantitative differences resulting from conceptual differences. Based on a study of three samples of corporations covering the period 1929-1937, the following are the principal conclusions: (1) On the average, book profit and "statutory net income," *i.e.*, taxable income, did not differ greatly from the period under consideration. On an *unaudited* basis, "book profit typically tended to exceed statutory net income, but usually by less than 10 percent" (p. 167). However, after auditing, the differences tend to be wiped out for most industries. (2) This general conclusion does not hold for certain mining and public utility industries where "book profit typically exceeds statutory net income by a much wider margin—often 50 per cent or more. Differences in depletion and depreciation accounting were probably responsible for most of the exremely large divergences" (p. 167). (3) Size of company does not appear to be a

factor, nor does the business cycle. (4) Variations are much greater in any one year and for any one group.

The obvious limitation of this part of the study is the fact that it deals with prewar data. It would be useful to know whether the same conclusions hold under postwar conditions.

Inventory Accounting and Policies deals with the impact and significance of the changes in the tax law which since 1938 permitted business to use the last-in, first-out (Lifo) method of inventory accounting. The study contains two major groups of topics: the first group deals with the general economic aspects of the problems involved in inventory accounting; the second, with the narrower but also important technical aspects of different methods of inventory accounting. Under the first group are such important topics as: the extent of "inventory profits"; the considerations which affect the choice of Lifo; the spread in the use of Lifo since 1938; the economic implications of different methods of valuing inventories and their relation to the concept of profits.

In the second group are discussed the technical and legal problems involved in the use of the traditional lower-of-cost-or market method, or of Lifo; the special problems raised by the adaptation of Lifo to the so-called "retail method" used widely by department and specialty stores; the relation of normal-stock and inventory-reserve methods to Lifo; and, finally, the effect of Lifo on national income and aggregate profits data. In addition, there are useful appendixes on the use of Lifo by individual companies, and a comparison of the carry-back provisions and the wartime inventory-reserve proposal. In spite of the highly slippery and technical nature of the problems discussed, the whole is handled skillfully and clearly.

As of the end of 1947, the period covered by the data in the study, the estimate is made that between 13 and 17 per cent of total manufacturing inventories were on Lifo and about 9 per cent of total "general merchandise" inventories and about 2 per cent of retail inventories. It should be noted that not all of a firm's inventories would be on Lifo. The use of Lifo is especially important in the following industries: meat packing, textiles and apparel, leather, lumber, paper, petroleum, iron and steel, and nonferrous metals. Moreover, its use is mainly concentrated among large companies. It is also used, but to a lesser extent, by department stores, and manufacturers of chemicals, foods, and beverages. Surprising is the omission of any branches of wholesaling.

The spread in the use of Lifo has been, as the study points out, mainly actuated by the desire to reduce the tax burden—a consideration especially relevant in a period of rising prices. There is also the broader question of the impact of Lifo on the functioning of the economy. Many writers, including businessmen, have argued that the use of Lifo will act as a strong stabilizing factor, for it will, they contend, even out the fluctuations in profits and hence in investment policy. Moreover, the use of Lifo will give, they also state, a "truer" picture of the earnings of business since costs will be based on current costs, not past costs.

The study points out in connection with the effect of Lifo on the sta-

bility of the economy that "... the case for including or excluding inventory profits from income rests on the effect of these policies on (1) business and investor expectations and (2) the cash position of business" (p. 10). To the extent that Lifo evens out the fluctuations in profits over the business cycle, it reduces the amplitude of fluctuations in expectations. On the other hand, it increases the cash resources of business during an upswing by reducing the tax burden and reduces them in the downswing by increasing the tax burden. This latter factor will act perversely on investment policy since the major portion of investment funds comes from internal sources. The study seems to feel that on balance the cash factor is more important than the expectations factor but that an inventory policy which removes the "distorting effects of inventory profits and losses" (p. 11) is a wise one. The authors say: "While we recognize the importance of a counter-cyclical national fiscal policy, we believe such a policy can be better implemented by other means than relying on a concept of income which exaggerates the extremes of business and investor expectations and which causes profits data to be subject to easy misinterpretation by the public" (p. 11).

This analysis overlooks the major importance of the pricing policy of business. In fact, the study is weak on this whole point, thus detracting from its otherwise major virtues. Most of the discussion about Lifo considers only its effects on costs and ignores its effect on prices. The usual assumption is that selling prices are invariant with respect to the different methods of inventory accounting. But this is a dangerous assumption. While business pricing practices vary widely, what is significannt is that the available data indicate for manufacturing (and even more for major areas of retailing) that gross margins remain fairly stable. If this be true, a shift to Lifo will on the average raise prices even more during a period of rising prices, and *vice versa* during a period of falling prices. Thus, a shift to Lifo may increase the amplitude of fluctuations of prices which would not conduce to the stability of the economy. Some businessmen, as reported in the study, made the point that a shift to Lifo made selling prices more responsive to changes in costs.

Nor does it follow that a shift to Lifo will necessarily even out the profits of all business over a business cycle. If a business is already pricing on a replacement cost basis, a shift to Lifo lowers its profits in a period of rising prices and raises them in a period of falling prices. But if a business prices on the basis of first-in, first-out, a shift to Lifo with gross margins unchanged will increase the fluctuations in profits. Since gross margins for industry as a whole remain fairly stable throughout the business cycle, the net effect of a shift to Lifo might well be to increase the fluctuations in profits for business as a whole whatever else it does for individual businesses.

A similar criticism attaches to the measure of "inventory profits and losses" as used by the study. To measure the over-all size of inventory profits, the study uses the Department of Commerce's Inventory Valuation Adjustment. The study recognizes in a footnote (p. 3) two difficulties with this "common use of the phrase"; (1) there are other meanings to the term inventory profits and losses; and (2) "it may seem confusing to call an increase in inventory

values caused by rising costs an 'inventory profit'." Unfortunately, Commerce itself has frequently spoken of the IVA as a measure of "inventory profits and losses." What the IVA measures in effect is the *actual* change in the replacement costs of the physical inventory held at the beginning of the period. Now it can be shown that the IVA measures an "inventory profit" in the sense that it will disappear with no further change in costs if business does two things: (a) it prices on a replacement cost basis; and (b) it keeps inventory on a first-in, first-out basis, or some variant thereof. Only then does a shift to Lifo cause that part of the profit to disappear. Otherwise, profits may go up if a shift to Lifo occurs since prices may rise.

There has been much public discussion over the significance of the reported profits of business in view of the large postwar size of the IVA. Do they represent a true measure of the long-run profitability of business or should they be adjusted down by the amount of the IVA? Because Commerce, for statistical reasons, subtracts the IVA from book profits, it is contended that business should also to show its "true" position. But whether business is overstating its profitability depends, in my opinion, on its pricing policy. I would argue that reported book profits do generally show the "true" profitability of business. The discussion, however, gets confused with another issue, *viz.*, the availability of profits as a source of funds. Here the fact that inventories must be replaced at higher prices does reduce the availability of profits for purposes of capital expansion, dividends, and other purposes.

This review has devoted a large amount of space to a critical discussion of one aspect of this book. Except for this point, basic as it is, the book is an excellent discussion of the whole problem and contains much valuable information. One important point which the study makes is that the more Lifo is used, the less reliable the balance sheet becomes, since inventory values will not reflect today's prices but of some period back. To overcome this, companies should publish data on the replacement costs of inventories. A corollary point which is implicit in this discussion is that the use of sales-inventory ratios becomes meaningless where Lifo is used unless some similar adjustment is used.

BENJAMIN CAPLAN

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Distributive Trading—An Economic Analysis. By MARGARET HALL. (London: Hutchinson's University Library. New York: Longmans Green. 1950. Pp. vii, 203. $1.60.)

Like its sister publications, *The Distribution of Consumable Goods*,[1] *The Economics of Advertising*,[2] *The Shops of Britain*,[3] and *Retail Distribution*,[4] this book is a welcome addition to the growing list of marketing publications originating in England. The author demonstrates an admirable facility in

[1] Braithwaite and Dobbs (London, Routledge, 1932).

[2] F. P. Bishop (London, Robert Hale, 1944).

[3] H. Levy (London, Kegan Paul, 1947).

[4] H. Smith (London, Oxford University Press, 2nd ed., 1948).

applying economic theory to the distributive trades—wholesaling and retailing. Through frequent comparisons of American and English experience she focuses attention on significant points and enhances the interest of the reader. Students of marketing, and particularly those who are interested in exploring the close relationships between economic theory and marketing, will find the book a fertile source of information.

In the judgment of the author, the distributive trades have much to offer both the theoretical and the applied economist. To the former, they offer "a perfect laboratory for research into the analysis of imperfect competition and oligopoly" while to the latter they provide a "theatre of activity hitherto unoccupied, one in which the drama of events is outstanding and the opportunity of revolutionary improvement in the standard of national comfort is not excluded" (p. vii). But, the author believes, the condition of the distributive trades in the United Kingdom is such as to provide a challenge to everyone. Consequently, the "aim of this book is to provide the reader with the minimum theoretical apparatus and the maximum of available data to enable him to make his own decision on an issue which will become more and not less controversial, more and not less urgent as time goes on" (p. vii).

Let us examine the procedure followed by the author in her attempt to accomplish this objective. In an introductory or background chapter she deplores the lack of available statistical material in view of the high degree of government control of the economic life of the country. Since successful policy-making and planning necessitate knowing the facts and interpreting them correctly, operating under a "statistical blackout" is a difficult task indeed. But the lack of information upon which to base policy in Britain has not prevented policy from being made. "In default of any clear picture of what constitutes distribution and the complex of economic issues involved, the distributive trades . . . have become the residual legatee of a number of controls vitally affecting their interests but imposed for other purposes: such are consumer rationing and price control; licensing of the sale of food; [and] town planning . . ." (p. 15).

The critical issues with regard to distribution are: (1) At a time of acute labor shortage can Great Britain afford to employ over two and three-quarter million persons (16 per cent of the working population) in the distributive trades as it did before the war? (2) Is the country getting its money's worth from such an expenditure, *i.e.*, are the distributive trades efficient? Answers to these questions are sought through an investigation of the size and organization of the distributive trades, and of the money and real cost of the services they render.

In making this investigation, the author devotes attention to the following factors among others: the mounting costs of distribution; the structure and economics of the retail and wholesale trades; advertising; resale price maintenance and trade associations; and some problems of the war and postwar periods. Naturally, major emphasis is placed upon conditions and experiences in Great Britain; but data concerning distribution in the United States are included frequently. For, despite "obvious differences in economic conditions in

the two countries . . . these American data illustrate many of our own dilemmas" (p. 14).

The author's brief discussion of the economics of retail trade is interesting because of her belief that this subject has not been treated adequately in general works on economics. Her analysis centers on two basic types of problems the retailer faces in maximizing his profits: (1) How best to serve his existing customers at any time (by equating marginal cost with marginal revenue) and (2) how to increase his expenditures in expanding the number of his present customers (increasing good-will) up to the profitable limit. Recognizing the inadequacy of an analysis, which assumes a "normal state of trade," when controlled inflation prevails, the author adds a valuable note on "over-full employment."

The wholesaler's functions are reviewed and trade in industrial goods and farm produce are considered briefly. Certain findings from the Reports of the Board of Trade Working Parties bearing upon lack of information, the urgent need for early consideration of the distributive trades in view of their national importance, and the impediments to maximum *productive* efficiency are summarized and the need for joint action in marketing research is stressed. Discussing the tendency toward non-price competition, she points out that this "is an instance of the effect of economic necessity on individual action in imperfectly competitive and oligopolistic markets" and that "its uneconomic results can only be controlled by joint action by producers, distributors, and probably the government, designed to restrict excessive multiplicity of types and uneconomically small purchases" (p. 105). The difficulties of obtaining such joint action, however, are recognized.

Turning to a consideration of the question—How far should wholesaling be competitive?—the author points out that some of the defects of wholesaling can only be remedied by limitations on competition. The alternatives lie between controls imposed by the industry, those imposed by government, and public trading. Experiments with control in Britain have proved disappointing, in so far as cost reduction and improved efficiency of wholesale distribution are concerned.

Turning to advertising—"one of the forms of non-price competition which naturally results from conditions of oligopoly"—the author discusses the nature and size of expenditures, Marshall's "constructive" and "combative" advertising, substitution, the aims of manufacturers and middlemen in advertising, and whether or not advertising expenditures can be regulated in the public interest. On the latter point, the author believes that the advertiser himself is the best judge, subject only to the qualification that he requires information on consumer preferences and the availability of substitutes in order to make a sound decision. Again evidencing her "research mindedness," the author proposes that "market research should be conducted on an industry basis financed by a compulsory levy on all firms in the industry and made available to all members" (p. 140). This proposal, of course, is a highly debatable one.

The chapter "Resale Price Maintenance and Trade Association" deals chiefly with three elements: (1) the diseconomies of price competition; (2)

the economic advantages of price maintenance; and (3) activities of trade associations.

In discussing the diseconomies of price competition the author points out four main reasons why large-scale producers have turned away from price competition: (1) they found price reductions to be a double-edged competitive weapon—often leading to price wars; (2) they learned that progressive product differentiation reduced the effectiveness of price competition; (3) they were convinced that price stability was an aid in the accurate measurement of costs; and (4) they feared that reductions in traders' margins would impair the efficiency of their distributors. But elimination of price competition through resale price maintenance also raises important problems, some of which may be attributed to the means by which it is effected.

The author's conclusion on resale price maintenance is significant. "If [it] is contrary to the interests of consumers, tends to favor and keep alive inefficient distributors in the face of over-capacity of the industry as a whole, to discriminate against the introduction of new and more efficient techniques of distribution and to prevent the consumer from exercising a choice between more elaborate distributive services and lower prices, it follows that something should be done to arrest its spread" (p. 170).

The final chapter is devoted to a statement of some war and postwar problems, and to a general summary of the study as a whole. Wartime controls over distribution are emphasized. Rationing of consumers' goods, price control, conscription of labor, and proposals to concentrate retail trade are examined in some detail. The treatment has high historical value.

With respect to the author's conclusions, the following appear to be most important.

1. Efficient distribution techniques cannot be arrived at through the application of a simple formula such as operating costs. From the consumer's point of view four distinct aspects are involved: (a) Trader's operating margins provide evidence of efficiency but must be interpreted in the light of long and short-run causes, including the size factor. (b) There is a wide variation in the nature and extent of services rendered by different traders. (c) The character and utilization of the resources that would be freed if certain enterprises were stopped would have to be examined. (d) The difficulties of accurate social accounting would have to be met.

2. The discovery of long-term solutions must await the collection of census data but the time is ripe for the proscription by legislation of any business practices which impede the adoption of more efficient techniques and for the education of the public in the economics of distribution.

3. Certain measures, tending to limit rather than exaggerate the uneconomic forces which operate in an imperfectly competitive market, should be adopted without awaiting the completion of a census. (a) Consumers' information services should be established to assist consumers to compare the serviceability of different brands of the same commodity and the availability of substitute articles in the market. (b) All trade associations should be required to register with the appropriate government agency and report their activities. (c) Re-

search is necessary to provide greater information regarding consumers' preferences and the quantity and character of resources which should be freed by reducing the number of distributive outlets.

4. Unless the over-expansion of distributive facilities is reduced, the living standards of those engaged in distributive activities cannot be guarded.

The author expects that some advance in the elimination of undesirable "restraints of trade" may be made through the Monopolies and Restrictive Practices Act of 1948. Moreover, the adoption of the Full Employment Policy has helped to place Great Britain in a position that would emphasize the necessity of "a common agreement that the aim of control and social policy is the more economic allocation of resources and the highest standard of living for all."

The author's conclusions represent little that is new to the close student of marketing. Economic analysis can and does substantiate them. But the reviewer was impressed with the author's insistence upon the collection of relevant data upon which sound public policy toward the distributive trades might be based, and her belief that under existing conditions in Britain with its "over-full employment" there is inadequate justification for the continued employment of 16 per cent of the nation's working force in the distributive trades. Her arguments are persuasive and convincing.

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Industrial Organization and Markets; Public Regulation of Business

Presidential Agency. By HERMAN MILES SOMERS. (Cambridge: Harvard University Press. 1950. Pp. xiii, 233. $4.50.)

This discussion of the President's problems of policy making, administration of policy, and organization for the implementation of policy is extremely important to current activities designed to implement not only the machinery made necessary by the Korean incident but also the activities which the 1946-1950 experience indicates are likely to be a continuing part of our national policy.

Somers describes the development of one presidential agency, OWMR, the Office of War Mobilization and Reconversion, to demonstrate the thesis "Examination readily reveals that the conditions which prompted the need for the Presidential assistance provided by OWM-OWMR did not originate with the war—although the war emphasized and influenced the character of the problem—nor did the end of war terminate such need" (p. 2). He concludes on page 223 with the statement "The OWM-OWMR experience is rich with practical lessons for the future. Out of the background of trial and error which preceded creation of the agency, out of its life history, its problems and methods, its successes and failures, there emerge some broad guiding principles which should be useful not only to some analogous agency in the event of

another holocaust, but also in the development of such a permanent institution as the proposed Office of Program Coordination."

The reviewer is torn between the desire to place this volume against the activities which have developed from the Korean incident and the necessity for according it the rôle which Somers obviously intended for it. The author was designing a building block for the structure of public administration. In its proper rôle it is a large, sturdy and well-designed piece of structural material. For the present emergency and the ones which are likely to follow on an almost year-to-year basis for the rest of our lives, it is a neat capsule of historical description and succinct analysis.

People participating in or interested in the problems of national mobilization should read this book. Before turning to the content of the volume itself, the reviewer feels called upon to introduce the only negative criticism which he has.

Somers inevitably was unable to read everything or to talk to everyone. As a result, there are some minor omissions of record, and there are some interpretations of events with which the reviewer would not completely agree. As to the omissions, a minor one is in the allocation of resources where Somers jumps in one step from priorities to the Controlled Materials Plan. In this he skips the intermediate efforts to revise the priority system and the first efforts at comprehensive allocation embodied in the Defense Supplies Rating Plan, and Production Requirements Plan and some of the related mechanisms (pp. 115-16). Since the questions of interpretation are highly personal, rather than engage in a detailed accounting, the reviewer wants only to say, to those who will read Somers' book as a guide to future implementing action, that the construction which he has placed on the events is only one of several possible interpretations and they should not view his judgments as final.

The major omission of *Presidential Agency* relates to a matter referred to by Somers on page 209: "As this is written, the National Security Resources Board and the National Security Council are being officially added to the Executive Office, although they have had Presidential staff functions from the time of their creation in 1947." Actually, the rôle assigned to these offices by the President has, to a large extent, given them the function which Somers urges on page 219, "It is proposed that there be added to the Executive Office of the President an Office of Program Coordination whose head would also be assistant to the President. The basic function of the program coordinator (a happier designation should probably be devised since the word 'coordinator' has too often been attached to a man without a job) would be to act for the President in the coordination of day-to-day program and policy operations of the executive branch, in contrast to fiscal management, administrative management, long-range economic planning, and military planning. All of these functions are closely related and must be apportioned among institutional units of the Executive Office, the whole of which should be considered and should act as a unified structure, which it does not today because of lack of organization."

One must read, therefore, Executive Order No. 10161, issued September 9, 1950, under which the President delegated certain of his functions under the

Defense Production Act of 1950, to determine the extent to which at least the cold war part of the program coordination job has been established and assigned to the NSRB and the NSC. Since this Order is amplified by a number of unpublished statements of understanding and informal agreements, it would be most helpful if all of this 1950 experience could be digested into *Presidential Agency*.

Although Somers has written to the question of organization and administration, his contribution may be even more valuable as a collection of the salient points of wartime industrial mobilization history. Not only has he selected his points of emphasis with sagacity, but also his presentation of the personalities and issues involved is exceptionally good.

In some 233 pages he has encompassed the major problems of economics and public administration which occurred during World War II. The introduction and eight chapters can be grouped into three major sections: I, the problems and organization before OWM; II, OWM-OWMR, the problems and the agencies with which it was concerned; and III, the continuing need for Program Coordination. Somers has prepared a most usable digest. In addition, he has injected into it appropriate reference to earlier historical events and has documented his book thoroughly with related work by other students of public administration. It is an important book and one given special timely significance by the events of the last year.

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Government and Business. By VERNON A. MUND. (New York: Harper. 1950. Pp. x, 649. $4.75.)

Professor Mund's new volume is definitely a textbook, replete with all the time-tested devices for aiding a student's memory and lightening a teacher's load. Besides the usual paraphernalia of previews, sideheads, summaries, pictures, "references for further reading," and the like, the chapter division conveniently cuts up the subject matter so as to provide two assignments per week for a full semester course.

As with the conventional textbook, too, the primary desideratum appears to be to "cover the ground." In fact the book's compass is broader than its title. A more exact description would be "Government and the American Economy." The first six chapters provide a liberal dose of the "orientation" now so fashionable in collegiate pedagogy. These sixty-seven pages, comprising a tenth of the volume, enlist anthropology, history, law, political science, psychology, sociology, and a few minor disciplines in a valiant attempt to construct an economic framework on a solid social foundation. It cannot be said that remarkable success attends the attempt. The disquisitions on the origins of government, private property, and markets, for example, follow the familiar lines developed several years ago by John Locke, Jean Jacques Rousseau, and Adam Smith.

The next seventeen chapters constitute a useful survey of the relations of "Government and Business" in the United States. These 400 pages cover

the subjects usually treated in college courses on public regulation of industry, or "Trade Regulation." However, it is difficult to detect traces of logical order in the arrangement; and for want of system, repetition abounds. Chapters 7 and 9 are devoted, respectively, to competitive and monopolistic price theory; sandwiched between them is a chapter on the growth of economic concentration through corporate consolidation. Chapters 10-14 review the legislative and judicial history of the Sherman Act and various acts granting exemption therefrom. A chapter on patents, their use and abuses, separates these five chapters from their logical sequel: a discussion of the Federal Trade Commission Act and the Clayton Act and their administrative and judicial application. Next, the basing point system gets two entire chapters (not to mention many briefer passages, *e.g.*, pp. 85-88; 206-8; and 304-5). These are followed by a chapter on S.E.C. jurisdiction and activities, after which the discussion of antitrust policy is resumed in three chapters on state legislation in this field.

The last section (not so marked off) consists of eight chapters treating a miscellany of subjects related more or less closely to antitrust policy. These include N.R.A., A.A.A., T.V.A., wartime price control, public utility rate regulation, N.L.R.B. policies, the social security program, and natural resources conservation.

The book as a whole is reasonably objective. But occasionally the author gives one a glimpse of his faith and indulges an evangelical bent. Thus, "In a free-enterprise economy, the satisfying of human desires, the production of *useful* goods, the practice of the *economic virtues* afford opportunities for profit" (p. 37; here, and hereinafter, the italics are the reviewer's, unless otherwise noted). Whether a qualifying clause appended to the third sentence following, but equally applicable to this statement, adequately serves its purpose, those familiar with student reading methods may judge. Again, "Competition . . . should be conducted according to good manners and good morals" (p. 642).

It should be added at once, however, that the "faith" is not *laissez faire*. It is the Wilsonian gospel of regulated competition. Far from embracing the nineteenth-century dogma, the author makes it out the root cause of most of the economic evils of the twentieth. And the "corporation lawyers" who advocated let-business-alone economics at the bar and enshrined it in their decisions on the bench constitute one of his two principal *bêtes noires* (*e.g.*, pp. 15, 16, and 150). The other consists of special-interest blocs, or pressure groups (pp. 27, 31, 212, 636, 638, and 643, *inter alia*). Popular education appears to be the author's main, if not sole, reliance for exorcising these two devils and giving a benign providence, disguised as competition, a chance to bestow its full bounty (pp. 30, 643, *et passim*).

A major shortcoming of the study is the neglect of definitions relating to certain vital aspects of the subject. Thus the statement (p. 14) that "Congress actually did very little in the way of exercising its regulatory power *prior to the advent of the New Deal in 1933*" might not appear so anomalous if the author were to explain that he was using "regulatory" in some special

sense. But such terms as intervention, control, regulation, direction, management, and manipulation are not defined or distinguished. Consequently, it is somewhat baffling to read that "It is the management which *directs* a corporation, and it is the management, therefore, which is responsible for what a corporation does" (p. 91; italics in original). Similarly, one is puzzled by a reference (p. 45) to "The *regulatory control* which Congress has come to *adopt*. . . . "

A related, but minor, shortcoming is the omission of explanations for several diagrams and figures. Thus a chart (p. 263) tracing the rise of output per man-hour and of real hourly earnings annually since 1899 is left "hanging in mid-air."[1] Likewise, a drawing (p. 271) illustrating the Langmuir invention of a tungsten filament lamp is deprived of significance by the failure to identify the symbols.

Notwithstanding the wide compass of the text, factual errors are few. The reviewer noted only two grevious ones: "The powers employed by the federal government over property include the power to regulate interstate commerce, the war powers . . . [*et al.*]. . . . These powers . . . are sometimes referred to as the federal 'police powers' " (p. 13). Not by courts or constitutional lawyers! "By the terms of the act [Fair Labor Standards Act] Congress imposed prohibitions on . . . the employment of workmen in industrial production for interstate commerce *at other than prescribed wages and hours*" (p. 19).

On the whole, Professor Mund's style is simple, direct, and clear. But a few excerpts will indicate that it is not free from blemishes. "The particular aspect of the public interest with which we are concerned in our present study is that of finding and effectuating the public interest in the economic area of man's relations, within the general framework of capitalism" (p. 55). "The doctrine . . . ['flash of genius'] . . . has been frequently used by the Supreme Court in its *growing* attempts to *increase* the standard for patentable invention" (p. 268). "The new interpretation placed by the Supreme Court on the Sherman Act in relation to unions was first developed in the Apex Hosiery case" (p. 569). "Government intervention—in the form of minimum wages, 'parity' prices, and enforced collective bargaining—moreover, has been extended to numerous lines of activity disadvantaged by monopolistic control in industry" (p. 628).

Lest this review leave the impression that Professor Mund's volume does not measure up to the current standard of a good textbook, let it be reiterated for emphasis that the book shows great erudition, patient attention to details, and earnest devotion to the public weal. Its classroom use should facilitate, if not a solution of the problem of industrial government, at least

[1] Though the data plotted on the chart are not discussed at this point or elsewhere, the textual citation of the chart follows this question: "How are the gains of technology to be made available to the people—to the nation as a whole?" The clear implication is that since, over the half century, output per man-hour rose approximately 230 per cent, and real hourly earnings only some 163 per cent, wage-earners got gypped. "The people," in short, "wuz robbed." If this was not the idea Professor Mund sought to convey by introducing the chart, his object is unfathomable to this reviewer.

a better understanding of the manifold obstacles to the practical realization of the competitive ideal. If the reviewer has any misgivings about the value of this textbook, they arise not from disagreement with the author's conception of the goal of public economic policy but from doubts regarding his views on the nature of the chief obstacles to its attainment and the aptness and adequacy of the methods outlined for overcoming them—whether preliminarily in the academic classroom or ultimately in the public forum.

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Public Utilities; Transportation; Communications

Economics of Transportation. By MARVIN L. FAIR and ERNEST W. WILLIAMS, JR. (New York: Harper. 1950. Pp. x, 757. $5.50.)

In this new textbook, Professors Fair and Williams have made generous use of the noun "economics"; it appears in the title of the book and in four of the five headings which subdivide the work into as many parts, as well as in the body of the book. (The five parts are titled Economics of Transportation Development, Economics of Transportation Service, Economics of Transportation Rates, Economics of Transportation Regulation, and Problems of Transportation Policy.) I approve this emphasis on economics, because unfortunately transportation specialists have tended for some time to introduce a mass of historical and other purely descriptive details into their books at the expense of economic analysis. If we go back far enough, or to the days of Hadley, Acworth and Ripley, transportation works were essentially treatises in applied economics. Also, distinguished general economists—Taussig, Seligman and Pigou—devoted considerable attention to the more theoretical aspects of transportation problems. But, with the passage of time, this close rapport was lost, until it appeared that economic theorists and transportation specialists had almost ceased communication.

I, therefore, began to read *Economics of Transportation* with the hope and keen anticipation that the authors had set themselves the task of helping to restore contact by featuring economic analysis in a transportation textbook. Several authors had already pointed the way with excellent textbooks, notably Locklin and Bigham, and it seemed to me that the time was ripe for another forward step to be taken. I have to report regretfully that, in spite of its many commendable features, the book falls considerably short of my expectations.

I shall illustrate my point by reference to those parts of the book which apply economic theory to transportation analysis. The crucial test is the use made of theories of monopolistic competition (including oligopoly), which are not only highly characteristic of modern economic thought but are also directly applicable to the field of transportation. This valuable bag of tools has been available for many years, or at least since Professor Chamberlin and Mrs. Robinson published their now classic studies in the 1930's. Yet, one looks in vain in the book under review for applications of the monopolistic-competition analysis to transportation. It is to be regretted that the authors have missed the opportunity to trace the effects of a limited number of com-

peting companies, of differentiated services, and of so-called competitive advertising on rates and services in the modern transportation market.

The parts dealing with applications of economic theory to transportation problems are, therefore, more out of date than I had expected to find. As a matter of fact, some of the theoretical errors which have appeared before in transportation textbooks are repeated by Fair and Williams. One of the most important of these concerns the nature of decreasing cost. In their discussion of this subject, the authors say, "... The principle of decreasing costs simply means that as output is increased the cost per unit declines. Fuller utilization of the carrier's facilities, through heavier and more balanced traffic, results in lower cost per ton-mile of service performed. This tendency to decreasing cost conditions is particularly significant among railroad lines because of prevalent and extensive excess capacity" (p. 370). The authors appear to have confused the conditions necessary for long-run decreasing costs (economies of scale) with those of underutilization of plant (over-capacity or insufficient total demand). While larger output would in either case tend to result in lower average unit costs, this identity in behavior is lost once the plant is operated beyond and to the right (on a curve) of the least-cost (optimum) point. When output is expanded beyond this point, short-run average costs will tend to rise, but the behavior of long-run average costs will depend on the presence or absence of economies of scale as plant capacity is increased.

The authors have also exhibited some uncertainty about the nature and significance of the distinction between common and joint costs. They write, "Transportation theorists have contended that differences in rates would essentially disappear under conditions of free competition. In practice this assumes that all common and joint costs would be prorated equally among commodities carried where no difference in cost of service exists" (p. 372). If the service is homogeneous and competition is perfect, rates will be equal to average unit costs, including overhead as well as variable costs. (Average unit costs will also be equal to marginal costs.) But under conditions of joint cost, the services are not homogeneous, even though they are supplied jointly, and the quantity of the services offered to the public tends to be determined by the equilibrium of the total receipts and costs of all services. Within the joint-cost framework, the rate charged for each service is determined largely from the demand side, and the indirect expenses are not prorated equally among the several services, no matter how free the competition may be otherwise.

I shall now offer a few comments on the chapters devoted to regulation. The discussion contained therein is quite brief and matter-of-fact, and I thought rather lacking in insight into the great regulatory problems of our day. This defect, however, is partially remedied in the final chapter of the book on national transportation policy. A curious omission is the failure to mention the recent controversy over the legal status of railroad traffic associations and rate bureaus, and the much-debated Bulwinkle Bill which is designed to place them under the protection of the Interstate Commerce Commission.

In spite of important omissions and errors, some of which I have mentioned,

this is a welcome addition to the literature of transportation economics. The writing is generally clear and suitable for elementary students. The authors depict the function of transportation in the present economic system, and judiciously minimize description of the history and development of transportation facilities. The nature of transportation service is featured, a welcome innovation in a textbook. The final part on questions of policy is written in a temperate and thoughtful style, and I find myself in general agreement with the authors' recommendations for a national transportation policy.

I can perhaps sum up my evaluation of the book by saying that it will serve well the needs of elementary students who do not intend to specialize in the field of transportation economics. Some of these students will be attracted from Arts but the bulk of them will be enrolled in the various curricula in Commerce. For those elementary students who plan to major in transportation, the book will also be useful, provided it is supplemented with suitable readings in other books and in professional journals.

RALPH L. DEWEY

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History of the American Newspaper Publishers Association. By EDWIN EMERY. (Minneapolis: Univ. of Minnesota Press. 1950. Pp. 263. $3.50.)

The American Newspaper Publishers Association was established in 1887 primarily to further the business interests of the press. Among other things, it has been concerned with rival communications media such as magazines, billboards, car cards, and more recently, radio and television.

Emery succeeds in clarifying the picture of what radio and the great depression did to newspaperdom during the 1930's. Confusion here generally arises from the fact that gross advertising billings to newspapers dropped some 40 per cent between 1929 and 1933, and barely regained 1929 levels a decade later. Whereas, during the same five-year period, radio billings soared 112 per cent. Or, to take another line: newspaper's portion of advertising billings to newspapers, magazines and radio toppled from 81 per cent in 1928 to 50 per cent in 1945, while radio's share rose from 1 per cent to 29 per cent. Small wonder that, almost in "self-defense," the proportion of newspaper-affiliated stations rose from 11.1 per cent in 1931, to 30.8 per cent in 1940, or that the ANPA took drastic steps against the young upstart radio. The really fundamental questions, however, were hardly raised until the newspaper-radio struggle had spent itself. They were: how much *new* money radio brought into the national ad revenue pie; how much it took from older media *other than* newspapers; and the extent to which the drop in newspaper ad lineage resulted from *cyclical* forces.

Emery places himself with those who would refrain from jumping to hasty conclusions upon superficial examination of available figures. He holds (p. 200) that before 1933 the depression and not radio was the chief culprit; that "other communications media, not the newspapers" lost most to radio. This he urges despite the Media Records Inc. report (cited at the ANPA's Convention in 1931) that 107 leading radio advertisers cut news-

paper appropriations 12½ per cent in 1930 over 1929 while increasing radio outlays 63 per cent and magazines 6.3 per cent. Statistical evidence and testimony presented at the F.C.C.'s Newspaper-Radio hearings in 1941, incidentally, are compatible with the author's view. The verdict then was that though radio "undoubtedly took some revenue from newspapers," it was impossible to tell how much.

In any event, wholly justified or not, the ANPA's attitude towards radio unquestionably changed after 1929. As the author relates, radio news bulletins and newspaper program logs, once considered valuable stimulants to newspaper sales, were found inimical to the publishers interest. Not only for hitting newspaper *circulation*, incidentally, but because advertising revenues supposedly suffered *despite* the fact that readership actually grew during the 1930's. The ANPA blamed, in part, the publicity value of radio columns and program logs carrying sponsors' names, both of which broadcasters used occasionally in soliciting advertising.

Emery rightly points to the birth of national networks and the Federal Radio Act of 1927 which brought order to the airwaves, as important factors strengthening radio's challenge. He also observes that the practice of granting broadcast licenses to applicants most likely to serve the "public interest, convenience and necessity" possibly encouraged radio to become an informational, news-disseminating medium as well as a source of entertainment. But, we must remember that the ANPA's opposition to sponsored news broadcasts in 1935 was based on more than its fear that newspapers would lose revenue and therefore be unable to render the highest quality service. The Association sincerely believed that advertisers would take over the final editing of news and thus endanger its reliability. In the eyes of the ANPA, at any rate, the public's interest here coincided with its own business interests.

The author might have speculated more on whether the newspaper-radio struggle and affiliation movement of the 1930's may be repeated with television. The situation is clearly analogous. And it is significant public policy-wise that even now as newspapers buy heavily into the new medium, and motion pictures seriously contemplate doing likewise, many industry and government officials agree that thus far television has brought considerable *new* money into the total ad revenue pie, as well as stealing from older media.

HARVEY LEVIN

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Industry Studies

The Economics of Pulp and Paper. By JOHN GUTHRIE. (Pullman: The State College of Washington Press. 1950. Pp. xi, 194. Cloth, $2.50; paper, $1.50.)

The author's announced purpose in this small volume is twofold: "to assemble and analyze the available economic data pertaining to this industry so that our understanding of its place in and impact on the economy

may be as complete as possible, and to examine and appraise its particular problems and trends in the light of current economic analysis." It is also proposed to ". . . throw additional light on an important phase of economics —the operations of an industry and the individual firms comprising it."

A creditable service has been performed in bringing together in one volume some of the statistics which have been hitherto almost unavailable, and especially in bringing into at least partial focus some of the problems of paper production on the Pacific Coast. The task of interpreting the economics of the pulp and paper industry—whatever that is—still remains to be done. It is unquestionably too large a job for such a small volume, and probably too large a job for any one man.

The author's ability to handle the newsprint industry[1] and to interpret its problems is not questioned by this reviewer. When he moves to other and completely separate parts of this (improperly so-called) pulp and paper industry, for example, paperboard—which has a different association, different companies, different problems, and different statistics, none of which are included in this volume—the author's apparent lack of familiarity with the source materials of those other branches has betrayed him. Because paperboard comprises about half of the total paper and pulp consumed in the United States, this has seriously damaged the volume's value. In a similar manner, little attention is paid to wastepaper and its problems, although it is the principal source of raw materials for a large portion of the paperboard industry, and accounts for about 30 per cent of the total fibres used in paper manufacture in the United States.

If another attack is to be made on these problems, there are some points which must be borne in mind:

1. The nature of the pulp and paper business is such that some mills are pulp producers, selling "market" pulp to paper manufacturers. Some produce paper entirely from "market" pulp. A third group produce paper from pulp of their own manufacture. Pulp statistics as such usually show only the "market" pulp. To generalize from such statistics is difficult at best, and often meaningless.
2. Such generalizations are particularly meaningless when there is eliminated from the discussion any Canadian or Scandinavian pulp—which are by far the principal sources of pulp for United States non-integrated paper mills. There is no national economics in this end of the business.
3. Cost data, by their very nature, must be carefully scrutinized for content and method before acceptance. Every table in the discussion of regional cost differences carries as a source "estimated by the writer," or "estimate based on confidential data." Conclusions based on such data are unacceptable to this reviewer.
4. Cooperative activities in an industry generally give a good clue to its economic problems, and the pulp and paper industries are noted for their effectiveness in this regard. Small attention is paid, however, to some of the cases

[1] As witness his excellent volume, *The Newsprint Paper Industry, An Economic Analysis*, published by Harvard University Press, 1941.

brought to the authorities, and none whatever to the paperboard rationalization scheme, which was perhaps the most effective of all.

The volume may be helpful to a person who is beginning his study of paper as such, particularly if he is interested in the problems of the Pacific Coast. It adds little to our understanding of the operation of these diverse industries or of the firms which comprise them. It is to be hoped that one of these days there will be prepared a thorough analysis of the pulp and paper industries, which are important not only because of their combined size, but because their methods of operation and their problems mirror the whole economy. It will, however, likely be a series of studies on the individual industries which comprise the group called paper and pulp, because of their diversity.

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Land Economics; Agricultural Economics; Economic Geography

America's New Frontier: the Mountain West. By Morris E. Garnsey. (New York: Alfred A. Knopf. 1950. Pp. xviii, 314. $3.50.)

From the earliest days of the Republic, there has been sharp awareness of regional differences within the country—differences in economic problems and potentials, political alignments, and social and cultural backgrounds and aspirations. One of the persistent efforts of American statesmanship in government and business has been to contain these differences and channel the energies associated with them into constructive and nationally integrated programs.

More recently, economists have been turning their attention to various economic regions or areas within the United States and in the other parts of the world. In close alliance with public administration and sociology and in response to economic, geographic, political, and other forces which demand a halfway house between the States and the Nation, economics, always a fissionable subject, seems to be spawning a special isotope called regional economics.

Professor Garnsey's book on the Mountain West in many ways is the best regional study yet made. In the first place, it reflects a dozen or more years of living in the Mountain West, teaching at the University of Colorado, thinking and writing about the mountain-high plains economy, and participating in various progressive movements in that region. Second, the book definitely has a thesis and a program for action broad and deep enough to meet the development problems and challenges of the Mountain West, which means the book is not economics narrowly confined. Third, there is much careful statistical and analytical work behind the various generalizations presented, but the author considerately refrains from employing figures to overwhelm the reader. Fourth, the emphasis is upon a developing and balanced region within a growing national economy; eastern Peter is not to be robbed, at

least unduly, for the benefit of western Paul. Finally, Garnsey writes with an easy, direct style and the book is beautifully designed and printed.

According to Garnsey, the Mountain West (Montana, Idaho, Wyoming, Nevada, Utah, Colorado, Arizona, and New Mexico) now stands at the crest of a divide. Ahead lies economic expansion with jobs for more people, higher incomes, and a greater regional contribution to the national economy —or relative decline and general stagnation. "The American people are now making decisions which will determine whether the Mountain West is to become a backwoods or a frontier in American life. . . ."

In terms of population, income growth, and the development of manufacturing, the Mountain West, Garnsey maintains, has been a victim of "leap-frogging." The economic spotlight was directed on this region briefly and in its proper turn during the bonanza mining years in the late nineteenth century, but then quickly shifted westward to the Pacific Coast, where it now shines strongly, leaving the mountains in the shade. How may this gap in our westward development be filled in, Garnsey asks. How may the traditional, time-honored western liberalism reassert itself, escape the clutches of the special-interest blocs which have perverted it, and lead to a rebirth of economic development?

Garnsey calls for a new liberal political and economic movement in the Mountain West based on three major issues: economic expansion, the decentralization of economic control, and the conservation of natural resources. Even more so than in earlier periods of western expansion, the new era of economic development in the Mountain States should be ushered in by large direct or indirect government investments in multiple-purpose land, water, forest, and mineral development projects. Investment potentials, Garnsey estimates, include three to four million additional acres of land which might be reclaimed by irrigation, 12½ million additional kilowatts of hydroelectric power, a two-billion-barrels-per-day oil shale industry, and a large atomic energy program. These kinds of basic conservation and development works would total 650 to 800 million dollars a year in present construction costs for the next two decades or so, and might be accompanied by about four times as much additional investment, much of which would be industrial investment and of great benefit to an under-industrialized region.

To facilitate a regional investment program of this magnitude, roughly three and one-quarter to four billion dollars a year, Garnsey suggests measures aimed toward decentralization of economic activities and controls, plus vigorous conservation programs at all levels—from the individual farmer, stockman, forest operator, and miner to the largest resource-using corporation, and from local governmental units to the federal government. Decentralization is to be furthered by continued efforts to readjust and rationalize the freight rate structure and freight classifications to the relative advantage of the West, by the elimination of basing-point pricing in gasoline, sugar, and other commodities important to this part of the country, by the encouragement of regional raw materials processing and other industries, and by the reduction of "absenteeism" and the "habit of exploitation." On the public

administration side, Garnsey makes a strong case for regional authorities adapted from the TVA model.

As a resources conservation frontier, Garnsey visualizes the Mountain West as capturing national leadership and guaranteeing its own future. Seven of the twelve points in his concluding program for action bear directly upon such matters as soil, range, and forest conservation and reclamation, exploration and more careful utilization of minerals, and water and hydroelectric development. The key to these developments is public investment in dams, irrigation ditches, transmission lines, and conservation works—all built sufficiently ahead of the traffic to encourage the actual development of the traffic.

Within this large framework, several chapters will be of particular interest to economists. Following sections on the place of the Mountain West in the American economy, the resources base and the economic base, is a section on the relative economic position of the region, with separate chapters on income, productivity, a balance of payments for the Mountain West, and institutional barriers to regional development. These chapters bring out such elements in the region's economy as: (1) the relative lack of industry in the region, and the dependence of its inhabitants for their incomes on trade and services and government; (2) the apparent paradox of relatively low per capita income with relatively high man-hour productivity in industry and agriculture, due to the heavy weighting of low value-added activities in the Mountain West economy; (3) the approximate size and trends of the major components in the region's balance of payments, in which large out-payments in the region's minerals account are offset by large in-payments in the federal government account; and (4) the critical importance of freight rates and pricing practices to regional development.

The series of chapters on politics and economics is highly illuminating with regard to the practices and inconsistencies of the famous silver bloc and the special interests representing sheep and sugar. The beet sugar industry, the evidence indicates, at long last has nearly become sturdy enough to stand on its own feet without benefit of tariff. But, as Garnsey says, a good many people will be waiting to see if this is really true.

The author rightly puts his finger on water as the most critical single item in the Mountain West economy, the loss of large amounts of which to other areas would cripple permanently the economic development of the region. The efforts of California on the one side and the downstream Missouri River States on the other to beg, borrow, capture, or steal water away from the headwater Mountain States constitute one of the absorbing stories of the day, and serve to keep those vitally concerned in a perpetual boiling-over condition.

Certain criticisms of the book may be made, but they are minor for the most part. Future editions, of course, will be revised to take account of the 1950 Census reports. Projections of the regional labor force to 1950 under three different assumptions look a little silly now, although one can't expect the author and the publisher on this account to hold back publication of a

book that is ready. The impact of recent events in Korea and the Far East probably calls for a reassessment of the security advantages of industrial decentralization and regional economic balance, which would upgrade the locational desirability of the Mountain West.

Economists might wish also for a deeper analysis of the possibilities and limitations of scheduling regional development investments to help compensate for regional and national economic fluctuations. The case for large additions to the irrigated acreage is made convincingly in terms of balanced development, economic and social, of the region. However, in terms of the whole country, which offers potential increases in agricultural production by means of land drainage and clearing, increased use of fertilizers and machinery, and other means, the case for western irrigation is not so clearly demonstrated.

The main contour lines of the book are accurately drawn and reveal sharply the region's economic and related political and social characteristics, problems, and potentialities. Garnsey has prepared a thoughtful, well-integrated study of the Mountain West which will be of greatest interest to persons in that region and to all others who are tempted to take Greeley's advice to young men about going west.

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Labor

Introduction to Labor Economics. By ORME W. PHELPS. (New York: McGraw-Hill. 1950. Pp. xvii, 554. $4.50.)

This volume, according to the author, is designed ". . . as an introductory textbook in labor economics, intended for upper division students (juniors and seniors) in liberal arts colleges or professional schools of business, social-service administration, or applied economics." And this reviewer would add: The volume has the great merit of concentrating on the significant issues of the labor market.

The first part of the volume (75 pages) deals with the general setting of labor problems: what labor problems are about, how they should be approached, the industrial and occupational distribution of the labor force, and some aspects of the American business system. Professor Phelps accurately emphasizes that every labor problem is a *total* problem (economic, psychological, etc.), but is careful correctly to stress that "Many labor problems are settled largely on the basis of a single set of facts. The question turns out to be primarily economic, legal, political, or psychological . . . [although it is not] possible to weight the disciplines in advance, assigning a definite priority of rank" (pp. 10, 11). It is questionable, however, whether it is accurate to aver that ". . . most labor problems are solved at the level of definition and measurement" (p. 12). For factual information by itself, no matter how copious, is never enough to "solve" a social problem since the interpretation given to the data will vary with the observer in question. And the variegated interpretations do not stem from purposeful bias so much as

they do from the exposure of the observers to different environments and different facets of the problem—not to mention the varying innate traits of the observers themselves.

The second part of the volume (78 pages) deals with wages. Professor Phelps' clarification of the different meanings attached to the term "wages" should prove helpful to teachers and students alike. Following this clarification, he proceeds to examine a number of wage theories (marginal productivity, the bargain theory, and the so-called Keynesian theory). Professor Phelps does not state categorically just what a theory of wages is designed to accomplish. Should it explain the process of wage *determination* or the process of *adjustment* in employment (and other variables) to a given wage change? Should it focus on the individual firm? On the relevant industry? On the entire economy? The author's failure to demarcate clearly the functions of a wage theory leads to some confusion in the reader's mind. Thus, for example, under the rubric of "Keynesian theory" Professor Phelps analyzes the adjustment of prices and employment to given wage changes, while under the "bargain theory" he analyzes the process of wage determination, and under "marginal productivity" he is doing both. Where, then, is the common denominator, which is a *sine qua non* for comparative purposes? Again, he shuttles between micro-analysis (pp. 100, 101) and macro-analysis (pp. 114 ff.) without explaining the fundamental difference in the two approaches. Finally, the author avers that Keynes was a bitter critic of the marginal productivity theory (pp. 90, 111), which is hardly accurate.[1] As a matter of fact, Keynes relied on the marginal approach whenever he had anything to say (explicitly or implicitly) about the theory of the firm. And in so far as macro-analysis is concerned, there is no inconsistency between the marginal analysis as expounded by (say) J. B. Clark and the analysis of *The General Theory*. For Clark was concerned with variations in the distribution of the national income among the different factors of production within the context of a given level of general employment, while Keynes was concerned with variations in the level of general employment under a given pattern of income distribution.

In summarizing the basic content of the marginal productivity theory the author fails to take account of the numerous refinements in that theory which have emerged in recent years—for example, the exploitation analysis. And while Professor Phelps covers many of the "standard" criticisms of the marginal approach, he does not even mention the fundamental weakness of the theory which has received cogent scrutiny by Boulding, Reder, Cooper and others—namely, the assumption of profit maximization. Nowhere, finally, does the author provide the reader with what he (the author) believes is an "accurate" theory of wages.

Part Three (86 pages) deals with employment security. Professor Phelps explains very clearly the different kinds of unemployment to which the economy is subjected, and also describes unemployment due to disability and discrimination. His emphasis on the point that the impact of technological unemployment is a function of cyclical unemployment is very pertinent. His

[1] *Cf. The General Theory,* especially p. 140, note 1.

total analysis of technological unemployment is, however, a somewhat sketchy two-page treatment.

In analyzing cyclical unemployment, which Professor Phelps correctly diagnoses as the real culprit in an enterprise economy, the author relies on the "Keynesian framework." While he uses this framework competently, he has failed to emphasize Keynes's principal contribution—namely, an insight into the long-run, structural changes of a capitalistic economy. It is hardly surprising, therefore, that the so-called secular stagnation thesis receives only brief attention.

The final part of the text (290 pages) deals with the history of trade-unionism, union government, union policies and tactics, and the rôle of government in collective bargaining. By and large, the material is presented in a fashion which the student should find interesting. Particular mention should be made of the author's stress on the important rôle of labor leadership in fashioning the pattern of collective bargaining, a point too often neglected in the literature. Approximately one-fifth of the entire volume, however, is devoted to the history of trade-unionism. While these pages provide the reader with an interesting picture of the important labor developments in the past, this reviewer would question the advisability of devoting so much space to the history of unionism. He would go further and question the scientific validity of studying the "general history" of unionism altogether. The ultimate function of any social science is to analyze problems and provide mechanisms of control. Historical material in any social science constitutes one of the sources of evidence in this process, and the study of so-called labor problems is no exception to these procedural dictates. But we cannot analyze labor problems "in general," for the issues to which scientific analysis must address itself in reality are concrete and specific. They may relate to union growth, the methods of wage payment, output restriction, labor turnover, etc. And in each case the analysis must, at least in the present stage of scientific inquiry, rely substantially on historical material. However, the "useful" historical material is not just labor or union history "in general." Instead, the relevant historical data must be brought into play as each particular labor issue is analyzed. Thus, for example, when one is dealing with union policies toward incentive wage methods, the historical material bearing on this problem (and not on unionism "in general") must be utilized. To be sure, if one is interested primarily in painting tableaux of past labor events, there is room for history of unionism "in general." But such an interest, while perhaps laudable from some viewpoints, can hardly be termed scientific.

The discussion of trade-union policies is rather brief (40 pages) in view of the impact of these policies on both market and non-market values. In some instances the logic of the policy is not explained. Thus, for example, the rationale of trade-union wage policy is neglected despite our relatively accurate understanding of this rationale owing to the work of Slichter, Dunlop, Ross, Myers, and others. And the economic implications of the various union practices are inadequately developed.

The volume as a whole can probably stand better integration of the constituent parts. While the presentation within each part is coherent, the inter-

relationships between the material in the different parts are neglected. One gains the impression of reading three well-written but unrelated monographs. To illustrate: In describing trade-union policies the author makes little attempt to relate these policies to the problem of unemployment analyzed in a preceding sector of the book. Again, while general wage changes are discussed in Part Two, they are not adequately called into play (either by cross-reference or otherwise) in Part Four, which deals with general unemployment.

The author also opts in favor of the presentation of several alternative theories on certain issues—for example, wages and the labor movement. While there is much to be said for such an approach, there is probably just as much (if not more) to be said against it. Given the space limitations of a text, the theory summaries must of necessity be brief and rather superficial. As a consequence, the student may easily gain an erroneous interpretation of the theory. Further, the student misses the opportunity of reasoning through in detail the analysis in question. He may, instead, well be encouraged to memorize the summary basic ingredients of each theory, without grasping the nature or significance of the viewpoints in question. To prevent such difficulties, it would seem advisable to present only one theory or viewpoint in detail. True, such an approach involves a danger: the student might be left with the impression that the viewpoint presented is the only one prevailing. Yet such a danger can be obviated by a brief notation to the effect that other theories are held by other observers. The student can thereafter, if he is interested, pursue the alternative explanations either on his own or in more advanced courses where such alternatives are discussed in detail. And he will be in a position to do so intelligently, precisely because he has learned how to engage in careful analysis by working through exhaustively one particular viewpoint.

The above comments do not alter the fact that Professor Phelps has written a volume which contains a great deal of interesting and useful information, which many teachers and students should find very helpful. The author's ability to express his thoughts in simple, "down-to-earth" language is an admirable quality which can prove only of the most constructive value in the classroom. The book has the further merit of avoiding minutiae and concentrating on the important issues. Finally, the bibliography and exercises provided by the author are a worthwhile pedagogical device.

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NOTES

The following have been appointed members of the American Economic Association nominating committee for the current year: Howard S. Ellis, University of California, Chairman, Karl R. Bopp, Federal Reserve Bank of Philadelphia, George A. Elliott, University of Toronto, Charles P. Kindleberger, Massachusetts Institute of Technology, Lloyd A. Metzler, University of Chicago, and William H. Nicholls, Vanderbilt University. The chairman of this committee would appreciate receiving any suggestions for officers for next year as soon as possible.

The First Conference of the International Economic Association

The International Economic Association was formally established by a constituent meeting of its Council, held in Monaco from September 10 to 13, 1950. At the same time, the Association held its first Round Table discussion, on the Problem of Long-Term International Balance.

The conference was attended by about forty economists from some fifteen countries.

The Council meeting adopted the statutes and elected the executive committee and the officers of the Association. They discussed the functions and policy of the Association after an introduction by M. J. Rueff.

The statutes which were finally adopted are substantially identical with the preliminary draft which was published in the *American Economic Review,* March 1950, pp. 173-76. The new International Economic Association is a federation of national associations. So far, the economic associations of the following countries have joined: United States, Great Britain, France, Belgium, Norway, Denmark, Netherlands, Canada, South Africa, Austria, Germany, Turkey, Greece, Sweden, Switzerland.

The Round Table

The Round Table discussions proceeded on the basis of eighteen background papers which had been circulated before or during the meeting but were not read there. The preparation of the program and discussion plan had been in the hands of Professor E. A. G. Robinson of Cambridge University, in close contact with Professors J. Schumpeter and G. Haberler of Harvard University. Mr. Hal B. Lary, Director of Research and Planning, E.C.E., Geneva, Sir Hubert Henderson, Professor at Oxford University, Professor L. Dupriez, University of Louvain, took a prominent part in the debate by introducing and summing up the discussion under particular headings.

Plans for future activities were discussed and it was decided that for the near future the main task of the I.E.A. would be to hold Round Table discussions on certain selected topics. These conferences will be open to invited guests only, the number of participants being held to about thirty. The topic for the 1951 Round Table will be "Monopoly and Competition and Their Regulation."

Election of Officers

With the formal establishment of the I.E.A. through adoption of its revised constitution, the Interim Executive Committee was replaced by a newly elected Executive Committee, to hold office until the next meeting of the Council. The Council is to meet every three years. Those elected are: president, Professor Gottfried Haberler (United States); vice president, Professor L. Dupriez (Belgium); treasurer, Professor E. A. G. Robinson (Great Britain); Professor F. Perroux (France); Professor W. Keilhau (Norway); Professor X. Zolotas (Greece).

The Executive Committee was purposely kept very small, in the interests of efficiency in the first place, but also to allow for possible expansion as new national associations join the I.E.A.

Tribute to Professor Schumpeter

Special tributes were paid by the International Economic Association to its first president-elect, the late Professor Joseph A. Schumpeter, whose passing last January was

mourned by the whole world of economic science. A telegram of sympathy was sent to Professor Schumpeter's widow.

The following economists were elected honorary presidents: J. M. Clark (United States); Luigi Einaudi (Italy); E. Heckscher (Sweden); A. C. Pigou (Great Britain); Charles Rist (France).

Dr. Helene Berger Lieser was appointed secretary of the I.E.A. Her offices are at 27, rue Saint Guillaume, Paris (7e) (Institut de Sciences Politiques).

DIRECTORY OF AMERICAN SCHOLARS

The second edition of the *Directory of American Scholars* is again being undertaken by The Science Press. The purpose of the *Directory of American Scholars* is practical rather than honorific, and to that end approximately 25,000 biographies are contemplated for the new edition, roughly twice the number contained in the first edition. There has been a somewhat slow response to the questionnaires which have been mailed out. All those who received questionnaires should mail them as promptly as possible to the editor. Those who have not received a questionnaire, but were included in the last edition, should notify the editor of the *Directory of American Scholars*, Lancaster, Pennsylvania, as he has some 2,000 returns which are undeliverable.

Deaths

J. Weldon Hoot, November 9, 1950.
William Walker Swanson, July 21, 1950.
Warren C. Waite, November, 1950.

Appointments and Resignations

Joseph Airov is instructor in economics in the School of Business Administration of Emory University.

Frederick Amling has been appointed instructor in finance, Wharton School of Finance and Commerce.

Richard J. Bannon has been appointed instructor in accounting in the Graduate School of Social Science, The Catholic University of America.

Eugene R. Beem has resigned as instructor in economics at the Wharton School of Finance and Commerce.

Richard F. Behrendt is director of the economic research department of the Economic Development Administration of the Government of Puerto Rico.

J. Fred Bell is on sabbatical leave from the University of Illinois in the current semester.

Archie Blake has resigned as a government statistician to devote more time as treasurer and mathematical consultant with Mechanical Research Corporation of Chicago.

Arthur I. Bloomfield, of the Federal Reserve Bank of New York, gave a course on business cycles in the winter term of the School of General Studies of Columbia University.

Karl A. Boedecker is associate professor of general business at Michigan State College.

Clarence E. Bonnett has been named emeritus professor of economics, College of Commerce and Business Administration, Tulane University, following his retirement in July, 1950.

Samuel L. Booth is assistant professor of economics at Juniata College.

Philip J. Bourque has been appointed instructor in economics at the Wharton School of Finance and Commerce.

Francis J. Bowden, Jr., is instructor in finance at the Wharton School of Finance and Commerce.

Raymond T. Bowman has been promoted from associate professor to professor of economics at the Wharton School of Finance and Commerce.

Dorothy Brady is on leave from the University of Illinois this semester to serve as consultant to the Bureau of Labor Statistics.

Joseph R. Burchard has resigned as assistant professor of economics at Western Reserve University.

Brian C. Butler has been appointed instructor in industry at the Wharton School of Finance and Commerce.

Eugene Clark has been promoted from assistant professor to associate professor of economics at Ohio Wesleyan University.

John A. Cochran has been granted leave from the University of Illinois to serve with the U. S. Army.

Robert H. Cole is instructor in marketing in the College of Commerce and Business Administration of the University of Illinois.

John T. Croteau has been promoted to associate professor of economics in the Graduate School of Social Science, The Catholic University of America.

Frank S. Deming is instructor in accounting at the Wharton School of Finance and Commerce.

William F. Dinsmore has been appointed instructor in economics at the Wharton School of Finance and Commerce.

Evsey Domar is visiting associate professor in the department of economics, Columbia University, during the spring session.

William L. Doremus has been promoted from assistant professor to associate professor of marketing in the Graduate School of Business Administration, New York University.

Charles S. Dunford, of Michigan State College, will retire as professor emeritus of economics at the end of the current academic year.

James O. Eaton is assistant professor of accounting at Michigan State College.

John M. Erickson has been appointed assistant professor of business administration in the College of Commerce and Business Administration, Tulane University.

Arnold L. Fellows is associate professor of business communications in the College of Commerce and Business Administration, Tulane University.

Hy Fish has returned to Roosevelt College after serving on a mission of the Department of State as consultant on production problems to the government of Israel.

Albert B. Fisher has been appointed lecturer in marketing at the Wharton School of Finance and Commerce.

J. Marcus Fleming is visiting professor of economics at Columbia University during the spring session.

Robert J. Freedman has been appointed visiting assistant professor of economics at Colgate University.

E. E. Garrison has been promoted from associate professor to professor of marketing in the College of Business Administration of the University of Tennessee.

Charles Gilbert has been appointed instructor in economics and business administration at Wagner College.

John A. Grygiel is traffic analyst with the Santa Fe Railway System.

Robert M. Haig is on leave from Columbia University in the spring session.

James K. Hall has returned to the University of Washington after a two months' assignment as consultant on public finance for the U. S. Treasury in the Republic of the Philippines.

Walter W. Heller is on part-time leave of absence from the University of Minnesota to enable him to serve as consultant to the Treasury in connection with current tax legislation.

Thomas W. Holland has been appointed special lecturer in economics at the Graduate School of Social Science, The Catholic University of America.

John M. Hunter, formerly of Tufts College, has been appointed assistant professor of economics at Michigan State College.

Charles D. Hyson has been appointed special assistant to the chief of the ECA Special Mission to Portugal.

Arthur A. Just has been appointed instructor in finance at the Wharton School of Finance and Commerce.

Everett M. Kassalow, formerly executive secretary of the Full Employment Committee of the Congress of Industrial Organizations, has been appointed special labor assistant to the chairman of the National Security Resources Board.

M. Thomas Kennedy has resigned as associate professor of industry at the Wharton School of Finance and Commerce.

Anthony Koo has been appointed lecturer in economics at Michigan State College.

Robert Laws has been promoted from assistant professor to associate professor of labor relations in the College of Business Administration, University of Tennessee.

Eric Lawson, of Syracuse University, is visiting professor of economics at Michigan State College.

Agnes Liang has been appointed lecturer in economics in the Graduate School of Social Science, The Catholic University of America.

Richard W. Lindholm, professor of economics at Michigan State College, is on special assignment with the Board of Governors of the Federal Reserve System in the current academic year.

C. Albin Lindquist is instructor in advertising in the Commerce Department, Florida State University.

C. F. Marsh, upon return from a year's service as coordinator-consultant, Advisory Council on the Virginia Economy, has been promoted to Chancellor Professor of Economics and Business Administration at the College of William and Mary.

Martha Marshall has been appointed instructor in economics at the University of Colorado for the winter and spring quarters.

James W. Martin, on leave of absence from the University of Kentucky, is serving as a financial management consultant to the Turkish government of Ankara.

Fritz Machlup, of the Johns Hopkins University, lectured during the month of February at the Institute of Advanced International Studies in Geneva, at the University of Basle, and at the Swiss Institute for International Economics at the University of Zurich.

Arthur D. Maxwell has been promoted from assistant professor to associate professor of accounting at the Wharton School of Finance and Commerce.

John S. McGee, of Vanderbilt University, has joined the staff of the department of economics, University of California, Los Angeles.

S. Sterling McMillan, of Western Reserve University, has been granted leave in the current semester to serve as director, Regulations and Orders Staff, Industry Operations Bureau, National Production Authority, in Washington, D.C.

Gilbert M. Mellin has been appointed assistant professor of economics in the College of Commerce and Business Administration, Tulane University.

Arthur J. Mertzke is lecturer in general business at Michigan State College.

Howard C. Miller, Jr., has been appointed instructor in marketing at the Wharton School of Finance and Commerce.

Taulman A. Miller is on sabbatical leave from Indiana University in the current semester.

James E. Moffat is on sabbatical leave from Indiana University in the current semester.

Walter R. Myers was presented with a Certificate of Merit by the President and the Board of Regents of the University of Minnesota upon his retirement in June, 1950.

Philip Nelson has been appointed acting instructor in economics at the College of William and Mary.

Edmund A. Nightingale has been granted a part-time leave of absence from the University of Minnesota to serve in the Military Transport Service, Washington, D.C.

Louis Nuesse has been appointed associate professor of industrial management in the College of Business Administration, University of Tennessee.

Andreas G. Papandreou has been appointed professor of economics at the University of Minnesota.

Walter S. Peake has been appointed instructor in business law at the Wharton School of Finance and Commerce.

Almarin Phillips has resigned as instructor in economics at the Wharton School of Finance and Commerce.

Chester A. Phillips, professor of banking and dean of the College of Commerce, State University of Iowa, will retire to part-time service at the end of the current academic year.

J. Richard Powell, of the University of Texas, joined the staff of the department of economics, University of California, Los Angeles, in September, 1950.

Neal A. Pritchard has been granted military leave from Ohio Wesleyan University to serve with the U. S. Navy.

John Quinn has been promoted from instructor to assistant professor of business administration at the College of William and Mary.

C. L. Quittmeyer, of the College of William and Mary, is at the Graduate School of Business, Columbia University, on a University Fellowship Award.

W. Harold Read has been appointed budget officer of the University of Tennessee.

Sydney C. Reagan has been appointed chief of the economic analysis section of the Fats and Oils Branch, Production and Marketing Administration, Department of Agriculture.

William J. Robert has been appointed assistant professor of business administration in the School of Business Administration, University of Oregon.

Robert M. Robinson has been appointed assistant professor of economics in the College of Commerce and Business Administration, Tulane University.

Franklin R. Root has resigned as instructor in marketing at the Wharton School of Finance and Commerce.

George Rosen, formerly assistant professor of economics at Bard College, is now economic analyst in the Division of Research, Far East, Northeast Asia Branch of the Department of State.

R. A. Sabatino has resigned as instructor in economics at the Wharton School of Finance and Commerce.

Roger L. Sherman has been appointed assistant professor of business at Texas A. and M.

Louis Siegelman is an instructor in economics at Cornell University.

William E. Simkin is an instructor in industry at the Wharton School of Finance and Commerce.

Warren Slagle has been promoted from instructor to assistant professor of accounting in the College of Business Administration, University of Tennessee.

Cecil N. Smith is associate professor of agricultural economics at Virginia Polytechnic Institute.

Henry W. Spiegel has been promoted to professor of economics, Graduate School of Social Science, The Catholic University of America.

Conrad Stewart has resigned as instructor in economics in the College of Business Administration of the University of Tennessee.

Paul J. Strayer, of Princeton University, is working with the Economic Stabilization Agency.

Alice J. Vandermeulen has been promoted from assistant professor to associate professor of economics and appointed assistant dean of the faculty at Claremont Men's College.

R. F. Voertman, formerly of the University of Texas, has been appointed instructor in economics at Michigan State College.

Charles E. Walker has resigned as instructor in finance at the Wharton School of Finance and Commerce.

Joseph P. Wargofcak has been appointed instructor in finance at the Wharton School of Finance and Commerce.

Norma Waschler has been appointed instructor in industry at the Wharton School of Finance and Commerce.

Sidney Weintraub has been appointed visiting professor of economics at the Wharton School of Finance and Commerce.

James E. Williams has been appointed instructor in industry at the Wharton School of Finance and Commerce.

Robert L. Winestone is assistant professor of economics at Coe College.

Herman W. Wright, Jr., is instructor in economics at the Wharton School of Finance and Commerce.

Herbert K. Zassenhaus, on leave from Colgate University, is working with the Twentieth Century Fund in Washington, D.C.

[illegible] J. [illegible] has been promoted from assistant professor to associate professor of economics and [illegible] of the faculty of [illegible] College.

[illegible], formerly of the University of Texas, has been appointed [illegible] in economics at [illegible] College.

Charles A. [illegible] has [illegible] as instructor in finance at the [illegible] School of Finance and Commerce.

[illegible] P. [illegible] has been appointed instructor in [illegible] in the Wharton School of Finance and Commerce.

George [illegible] has been appointed instructor in [illegible] in the Wharton School of Finance and Commerce.

[illegible] has been appointed visiting professor of [illegible] in the Wharton School of Finance and Commerce.

[illegible] C. [illegible] has been appointed instructor in [illegible] in the Wharton School of Finance and Commerce.

Arthur C. Wilkinson is acting [illegible] of economics at the College.

Howard W. [illegible] Jr. is instructor in [illegible] in the Wharton School of Finance and Commerce.

[illegible], on leave from [illegible] University, is [illegible], Washington, D.C.

VACANCIES AND APPLICATIONS

The Association is glad to render service to applicants who wish to make known their availability for positions in the field of economics and to administrative officers of colleges and universities and to others who are seeking to fill vacancies.

The officers of the Association take no responsibility for making a selection among the applicants or following up the results. The Secretary's Office will merely afford a central point for clearing inquiries; and the *Review* will publish in this section brief descriptions of vacancies announced and of applications submitted (with necessary editorial changes). It is optional with those submitting such announcements to publish name and address or to use a key number. Deadlines for the four issues of the *Review* are February 1, May 1, August 1, and November 1.

Communications should be addressed to: The Secretary, American Economic Association, Northwestern University, Evanston, Illinois.

Vacancies

Business opportunity: Man with Ph.D. in economics and business experience is seeking an associate for a new economic services organization which will specialize in general economic business consulting and training. Associate should be 35 to 45 years old, have a Ph.D. in economics, be a good public speaker, have some business experience; be able to contact and command the respect of business executives. Headquarters will be in the Middle West. Write key number, giving fairly comprehensive personal information. P143

Economics and government: Instructor to teach courses which cut across the fields of economics and government: international trade, business organization, public finance, public administration. Eastern women's college. Duties to begin in September, 1951. P144

Economists Available for Positions

Middle Eastern economics, Russian economic organization and history, European economic history, international economics: Man, Ph.D.; foreign and American postgraduate work. Teaching experience, undergraduate and graduate, in Eastern colleges and universities; author and writer of many studies; seeks teaching position for summer session, 1951. E219

International economics, principles of economics, money and banking, statistics, economic history, labor: Man, 40, Ph.D., University of Frankfurt (Main); U. S. citizen. Eight years of experience as economist with U. S. government agencies and with leading private economic research organization; now teaching at Eastern college. E255

Accounting, labor economics and personnel, business management: Man, 45, married, Ph.D. Twenty years of college and university teaching and administrative experience. Formerly full professor and head of department; now employed at U. S. Department of Labor. E273

Economic theory, business cycle and monetary theory, public finance, international economics, comparative economic systems: Man, 32, married, Ph.D. residence completed. Six years as economist with leading research organizations; brief teaching experience. Research in Middle East economy. Seeks research or teaching position. E278

Principles of economics, advanced economic theory, money and banking, history of economic doctrines, comparative economic systems, international economic problems: Lady, Ph.D. (*summa cum laude*), University of Basle. International background; many languages; studied in Vienna and Switzerland. Twenty years of teaching experience as lecturer at Geneva University, Switzerland; 4 years in this country on graduate and undergraduate level, East and West; 3 years as head of department of economics in Western liberal arts college. Substantial research work; author of several books and numerous contributions to scientific periodicals. Interested in full or visiting professorship in economics in university or high-ranking college or collaboration with bureau of economic research. American and European references. E283

Foreign trade, localization, economic policy: Man, 48, Austrian, at present visiting professor at a Western university (permanent permit for America). Original contributions to theory (price and foreign trade) and policy (interventionist technique); international teaching experience (Austria, Low Countries, professorial status at Oxford, head of departmentship at a leading Oriental university); 15 surveys, 8 publications and many periodical articles; high degrees. Allied government economic adviser and international expert; diplomatic and currency-banking experience; personality. Prefers post where postgraduate research direction is possible. E303

Business administration, business law, organization and finance, personnel management, insurance, real estate, the marketing group, economics: Man, married. Extensive teaching and administrative experience as department chairman and as head of school of business and economics of state university. E306

Economic theory, history of economic thought, business cycles, capital and labor problems, international trade, comparative economic systems: Man, 45, European, three German degrees, including doctor's. Fifteen years of university teaching experience; original contribution to the theory of economics; author of several works in three languages; excellent criticisms and recommendations from many university professors. Wishes position in economics. E317

International trade, finance, statistics, prices, money and banking, principles: Man, 32, M.B.A., Columbia University; Ph.D. nearing completion. Currently assistant professor. Available in June or September. E326

Industrial and labor relations, business and mathematical statistics, social security, economics: Man, 38, Ph.D. Full experience in research, teaching, publications. Seeks university post teaching or research. E328

Economics and business administration, economic history, labor, money and banking, economic principles, problems, accounting, marketing, retailing, business law, management and labor relations, office management, business mathematics: Man, 38, married, B.S., graduate study. Three years law; experience in business and teaching, including 3 years in machine tool industry and teaching in vocational school and private business college; 2 years adviser state board of vocational education for adults. E336

Economic theory, money and banking, corporation finance, business statistics, government and business, business administration: Man, 32, M.B.A., University of Chicago, 2 years towards Ph.D. in economics, Iowa State. Three years of valuable teaching experience; industrial experience. Advailable in winter, 1951. E342

Economic planning, Soviet Russia and East European economics: Man, 38, married, master's degree in law and economics from a European university; working on Ph.D. in an American university. Desires teaching, research, or advisory position. E344

Economic theory, history of economic thought, public finance, international economics: Man, 49, married, Ph.D. (*magna cum laude*). American citizen, with broad international background; 24 years of teaching experience; 12 years as import and export adviser. Many publications and articles in three languages; at present assistant professor at state university; seeks associate professorship or full professorship. E346

Economic theory, government and business, public law and public administration: Man, 35, married, M.A., completed all course requirements for Ph.D., *summa cum laude* honors. Associate editor of and feature writer for national monthly publication for 3 years; 4½ years in Army; U.S. Government fiscal accountant 5 years; consultant, United Nations affairs, 1 year. Seeks teaching position. Highest references and ratings. E347

Labor economics, collective bargaining, labor legislation, government and business, business cycles: Man, 36, Ph.D., University of California. Seven years of successful teaching experience; 6 years responsible positions with federal government. Desires position in or near metropolitan center. E349

Economic theory, advanced and elementary international economics, history of economic thought, industrial and labor relations, government and political theory: Man, 28, M.S., Columbia University; candidate, *Docteur es Sciences Politiques*, University of Geneva; Fulbright fellow, University of Amsterdam. Two years as foreign correspondent, Columbia Broadcasting System; 4 years of business experience as economic consultant; 1 year teaching, university level. Seeks permanent post with high-ranking institution. E350

Economic principles, economic thought, general economic history, monetary economics, labor problems, comparative economic systems, structure of Soviet economy: Man, 27, B.A. (*summa cum laude*), New York University; M.A., Columbia University; has completed residence requirements for Ph.D. at Columbia University. Part-time instructor in economics at large Eastern university; at present, national executive director of an Institute of Social and Political Science. Seeks teaching position. Available in September, 1951. E352

Statistics, theory, industrial relations, finance: Man, 28, small family, working on Ph.D. dissertation, University of Chicago, with tentative completion date 1951. Three years of college teaching experience; now associated with a Midwestern university. Can accept either academic or nonacademic position. E358

Economic theory, economics of war, economic systems, government and business, banking and finance, business and industrial statistics: Man, 28, single, American citizen, B.A., candidate for M.A. Physics research assistant for industrial science company for 2 years and experience as control clerk for aircraft factory, radio announcer, geographic map room assistant, and translator. Desires position as instructor or research assistant, preferably with opportunity for continuing graduate work. E359

Economic principles, international trade, public control of business, money and banking, history of economic thought, corporation finance, economic statistics, business cycles, business administration: Man, 24, B.B.A., M.S. and completed residence requirements for Ph.D., Columbia University. At present part-time instructor in economics while completing Ph.D. program. Seeks teaching position. Available in September, 1951. E360

Economic history, development of economic thought, government and business, transportation, public utilities, industrial relations: Mature woman, finishing doctoral dissertation this semester. Wide experience in business and government service; university teaching experience; one year as assistant director of bureau of business research at large Midwestern state university; one year as head of department in small university. Available in spring, 1951. E361

Public finance, labor economics, international economics, economic principles: Man, 26, M.A. in economics and course work in progress for Ph.D. Four years of successful teaching experience. Available in summer or fall, 1951. E363

Wide range of economic subjects: Man, 50, Austrian born, American citizen. Many articles. Seeking part-time work as researcher on economic subjects in New York Public Library. Available immediately. E364

Theory, history of doctrines, industrial organization, economic history, public finance, money and banking, comparative systems: Man, 40, married, Ph.D. from outstanding institution. Seven years of teaching, plus many years of federal government and business experience; several publications. Available in fall, 1951. E365

Economic theory, monetary economics, business cycles, international trade, economic history, statistics: Man, 35, married, M.A., Columbia University, with further work towards Ph.D. Two years of part-time teaching at leading university; 2 years of experience with private research organization. Seeks teaching position. Available in summer or in September, 1951. E366

Economic principles, theory, mathematical economics, statistics, money and banking, labor economics, history of economic thought: Man, married, Ph.D. residence completed. Three years of teaching and research experience at Midwestern and Eastern university; now employed at Bureau of Labor Statistics. Seeks university teaching or research position. Available in June, 1951. E367

Principles of economics, economic theory, Russian economics, South American economics, labor problems, consumer economics, economic fluctuations: Man, 25, B.A., New York University. Two and a half years in Army; seeking assignment in New York City area. Available immediately. E368

Economic principles and theory, economic history of U. S. and Europe, comparative economic systems, money and banking, business cycles: Man, 40, Ph.D., American citizen with wide international background; several languages; 7 years of teaching experience at two leading American universities; substantial research work; excellent ratings. Available for teaching position in September, 1951. E369

International economic relations, international relations in general, political science, political theory, diplomatic history: Man, 40, married, Austrian, permanent resident (quota immigrant) since 1941, LL.D. and Dr. pol. sci., Vienna, Ecole des Sciences Politiques, Paris. Several years of experience as instructor at leading American universities; 4 years of experience as research economist of one of largest U. S. corporations. At present high-ranking official and head of research department of international economic organization in Europe; publications; widely traveled; perfect command of several languages; desirous to return to U. S. as professor of international relations or research director. Available in July or September, 1951, release from present post subject to three months' notice. E370

Principles, theory, money and banking, international economics, comparative systems, cycles: Man, 26, M.A., advanced Ph.D. candidate. Teaching experience. Available in September for teaching or for research using statistics and knowledge of several languages. E371

Research: Woman, Phi Beta Kappa, M.A., Columbia University, Ph.D. academic requirements completed. Eight years of economic research experience; publications. Available to undertake economic research for students, writers, and foundations requiring use of Library of Congress and other government facilities in Washington, D.C. References will be furnished if desired. E372

Economic principles, economic thought, economic history, international economics, labor economics, economic systems: Man, 38, married, Ph.D. residence completed. Experience with Federal Security Agency, War Labor Board; formerly chief, repatriation division of UNRRA, U. S. Zone, Germany. Now directing university administrative center of 2,000 students. Can accept either academic or nonacademic position. E373

Economic theory, economic history, money and banking, social policy, general education in and teaching of economics and social sciences: Man, 36, married, Ph.D., University of Chicago. Ten years of teaching experience in economics and general education at leading Midwestern university; now assistant professor. Desires position in which he may teach above subjects and continue experimentation, research, and writing on economics in general education. Available in September, 1951. E374

Principles of economics, international trade, money and banking, public finance, statistics: Man, 25, M.A., Fordham University. Two years of college teaching experience. Seeks teaching position in East where graduate study can be continued or a part-time teaching position in conjunction with Ph.D. study. E375

Economic theory and principles, Eastern European economics, international economic problems, sociological background of economics: Man, 30, married, Ph.D. (*magna cum laude*), University of Innsbruck (Austria); permanent permit for America. Special interest in relations between religion and economics from Protestant standpoint. Desires teaching or research position. E376

Economic principles, economic theory, money and banking, history of economic thought, public finance: Man, 28, married, M.A., University of Pennsylvania. Now teaching in Southern college. Seeks teaching position in or near university with graduate facilities to continue work on Ph.D. E377

Economic theory, international economics, money and banking, economic doctrines, economic systems: Man, 30, M.B.A., J.D., working on Ph.D. as fellow in economics at large Midwestern university. Teaching, industrial, business experience; international background. Desires teaching or industrial position. Available in June, 1951. E378

75th Anniversary of the Birth of the Telephone

1876 ★ 1951

Bell's Liquid Transmitter and Tuned Reed Receiver, March, 1876.

Suppose the Telephone Had Never Been Invented

Have you ever thought what the world and your life would be like without the telephone?

If you wanted to talk to relatives or friends – if you wanted to order from a store – if you needed to summon a doctor or a policeman in an emergency – there would be no way you could do it in a hurry. What now takes only a few seconds or a few minutes would often take hours and cost you far more than a telephone call.

Each year the telephone becomes more useful to the people and more vital to the prosperity and security of the Nation. Today's tremendous job of production and defense could not be carried on without it.

There are twice as many Bell telephones as there were only ten years ago. They are here and ready because the Bell System kept right on building to meet the country's needs.

Never in the history of the telephone has it been so valuable to so many people as right now.

BELL TELEPHONE SYSTEM

Forthcoming Texts in Finance

READY APRIL 15

INVESTMENT ANALYSIS AND MANAGEMENT

By Lester V. Plum, Economist, Calvin Bullock, and Lecturer in Finance, Columbia University, and Joseph H. Humphrey, Jr., Portfolio Administrator, Calvin Bullock

Investment analysis and management as actually conducted in the present-day financial world is the subject of this new textbook for courses in investment finance. It is written in terms the beginner can understand; yet it is in no sense written down or over-simplified. Its point of view is that of the professional investment analyst. Its aim is to give the student an honest and realistic view of investment problems and of the means for their successful solution. Problems of investment management are covered in the early part of the book, and then the discussion moves on to the techniques of analysis as applied to industrial, railroad, public utility and other securities. Common stocks receive considerable attention. The separate disciplines used in investment analysis — for example, statistics and business cycle analysis — are not treated in rigid segregation but are brought to bear in an integrated manner on the over-all problem. Emphasis is placed upon the importance of a knowledge of American industry, over and above routine study of historical records and financial statements. The importance and difficulties of proper timing are stressed. Formula plans and investment trusts are scrutinized for the role they may play in meeting the investor's problems. Mathematics of finance and elementary discussions of life insurance and annuities have been included in appendixes. Review questions, thought-provoking topics for discussion, and an excellent collection of case problems will serve to enliven the course and foster independent thought.

READY MAY 15

FINANCIAL INSTITUTIONS

By Erwin W. Boehmler, Roland I. Robinson, Frank H. Gane, and Loring C. Farwell, *all of Northwestern University*

This text is offered for a broad survey course in financial institutions — for a first course given without prerequisites and itself preparatory to later courses in money and banking, business finance, corporation finance, investments, business cycles, credits and collections, and insurance. Such courses are gaining in popularity, for it is obviously to the student's advantage to acquire earlier than has been customary in the past the basic knowledge of the workings of our financial system without which he is seriously handicapped throughout his business education. Then, too, this text and the course for which it is designed will give the student indispensable information for his business career and private life, even if he is unable to take additional courses in this field. Since no previous knowledge of economics is required of the student the text opens with a quick survey of economics, giving basic concepts. Monetary theory is also briefly treated. Then the student is introduced to some 60 financial institutions. Not a single institution fails to get attention, and the important ones are accorded all or part of a chapter. How the banking system creates credit, ups and downs of the business cycle, the workings of the Federal Reserve System, and some peculiarities of government finance are covered later in the text, and the discussion ends with a brief survey of international finance. While planned as a basic text for courses in financial institutions, this text will also find use as a supplementary text for the regular money and banking course.

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